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TRADE UNIONISM
AND
MUNITIONS

BY
G. D. H. COLE

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EDITOR'S PREFACE

IN the autumn of 1914 when the scientific study of the effects of war upon modern life passed suddenly from theory to history, the Division of Economics and History of the Carnegie Endowment for International Peace proposed to adjust the programme of its researches to the new and altered problems which the War presented. The existing programme, which had been prepared as the result of a conference of economists held at Berne in 1911, and which dealt with the facts then at hand, had just begun to show the quality of its contributions; but for many reasons it could no longer be followed out. A plan was therefore drawn up at the request of the Director of the Division, in which it was proposed, by means of an historical survey, to attempt to measure the economic cost of the War and the displacement which it was causing in the processes of civilization. Such an 'Economic and Social History of the World War', it was felt, if undertaken by men of judicial temper and adequate training, might ultimately, by reason of its scientific obligations to truth, furnish data for the forming of sound public opinion, and thus contribute fundamentally towards the aims of an institution dedicated to the cause of international peace.

The need for such an analysis, conceived and executed in the spirit of historical research, was increasingly obvious as the War developed, releasing complex forces of national life not only for the vast processes of destruction but also for the stimulation of new capacities for production. This new economic activity, which under normal conditions of peace might have been a gain to society, and the surprising capacity exhibited by the belligerent nations for enduring long and increasing loss—often while presenting the outward semblance of new prosperity—made necessary a reconsideration of the whole field of war economics. A double obligation was therefore placed upon the Division of Economics and History. It was obliged to concentrate its work upon the

problem thus presented, and to study it as a whole; in other words, to apply to it the tests and disciplines of history. Just as the War itself was a single event, though penetrating by seemingly unconnected ways to the remotest parts of the world, so the analysis of it must be developed according to a plan at once all-embracing and yet adjustable to the practical limits of the available data.

During the actual progress of the War, however, the execution of this plan for a scientific and objective study of war economics proved impossible in any large and authoritative way. Incidental studies and surveys of portions of the field could be made and were made under the direction of the Division, but it was impossible to undertake a general history for obvious reasons. In the first place, an authoritative statement of the resources of belligerents bore directly on the conduct of armies in the field. The result was to remove as far as possible from scrutiny those data of the economic life of the countries at war which would ordinarily, in time of peace, be readily available for investigation. In addition to this difficulty of consulting documents, collaborators competent to deal with them were for the most part called into national service in the belligerent countries and so were unavailable for research. The plan for a war history was therefore postponed until conditions should arise which would make possible not only access to essential documents but also the co-operation of economists, historians, and men of affairs in the nations chiefly concerned, whose joint work would not be misunderstood either in purpose or in content.

Upon the termination of the War the Endowment once more took up the original plan, and it was found with but slight modification to be applicable to the situation. Work was begun in the summer and autumn of 1919. In the first place a final conference of the Advisory Board of Economists of the Division of Economics and History was held in Paris, which limited itself to planning a series of short preliminary surveys of special fields. Since, however, the purely preliminary character of such studies was further emphasized by the fact that they were

directed more especially towards those problems which were then fronting Europe as questions of urgency, it was considered best not to treat them as part of the general survey but rather as of contemporary value in the period of war settlement. It was clear that not only could no general programme be laid down *a priori* by this conference as a whole, but that a new and more highly specialized research organization than that already existing would be needed to undertake the Economic and Social History of the War, one based more upon national grounds in the first instance and less upon purely international co-operation. Until the facts of national history could be ascertained, it would be impossible to proceed with comparative analysis; and the different national histories were themselves of almost baffling intricacy and variety. Consequently the former European Committee of Research was dissolved, and in its place it was decided to erect an Editorial Board in each of the larger countries and to nominate special editors in the smaller ones, who should concentrate, for the present at least, upon their own economic and social war history.

The nomination of these boards by the General Editor was the first step taken in every country where the work has begun. And if any justification was needed for the plan of the Endowment, it at once may be found in the lists of those, distinguished in scholarship or in public affairs, who have accepted the responsibility of editorship. This responsibility is by no means light, involving, as it does, the adaptation of the general editorial plan to the varying demands of national circumstances or methods of work; and the measure of success attained is due to the generous and earnest co-operation of those in charge in each country.

Once the editorial organization was established there could be little doubt as to the first step which should be taken in each instance towards the actual preparation of the history. Without documents there can be no history. The essential records of the War, local as well as central, have therefore to be preserved and to be made available for research in so far as is compatible with public interest. But this archival task is a very great one, belonging of right to the governments and other owners of historical sources

and not to the historian or economist who proposes to use them. It is an obligation of ownership ; for all such documents are public trust. The collaborators on this section of the war history, therefore, working within their own field as researchers, could only survey the situation as they found it and report their findings in the form of guides or manuals ; and perhaps, by stimulating a comparison of methods, help to further the adoption of those found to be most practical. In every country, therefore, this was the point of departure for actual work ; although special monographs have not been written in every instance.

This first stage of the work upon the war history, dealing with little more than the externals of archives, seemed for a while to exhaust the possibilities of research. And had the plan of the history been limited to research based upon official documents, little more could have been done, for once documents have been labelled ' secret ' few Government officials can be found with sufficient courage or initiative to break open the seal. Thus vast masses of source material essential for the historian were effectively placed beyond his reach, although much of it was quite harmless from any point of view. While war conditions thus continued to hamper research, and were likely to do so for many years to come, some alternative had to be found.

Fortunately such an alternative was at hand in the narrative, amply supported by documentary evidence, of those who had played some part in the conduct of affairs during the War, or who, as close observers in privileged positions, were able to record from first or at least second-hand knowledge the economic history of different phases of the Great War, and of its effect upon society. Thus a series of monographs was planned consisting for the most part of unofficial yet authoritative statements, descriptive or historical, which may best be described as about half-way between memoirs and blue-books. These monographs make up the main body of the work assigned so far. They are not limited to contemporary, war-time studies ; for the economic history of the War must deal with a longer period than that of the actual fighting. It must cover the years of ' deflation ' as well, at least sufficiently

to secure some fairer measure of the economic displacement than is possible in purely contemporary judgements.

With this phase of the work, the editorial problems assumed a new aspect. The series of monographs had to be planned primarily with regard to the availability of contributors, rather than of source material as in the case of most histories ; for the contributors themselves controlled the sources. This in turn involved a new attitude towards those two ideals which historians have sought to emphasize, consistency and objectivity. In order to bring out the chief contribution of each writer it was impossible to keep within narrowly logical outlines ; facts would have to be repeated in different settings and seen from different angles, and sections included which do not lie within the strict limits of history ; and absolute objectivity could not be obtained in every part. Under the stress of controversy or apology, partial views would here and there find their expression. But these views are in some instances an intrinsic part of the history itself, contemporary measurements of facts as significant as the facts with which they deal. Moreover, the work as a whole is planned to furnish its own corrective ; and where it does not, others will.

In addition to this monographic treatment of source material, a number of studies by specialists is already in preparation, dealing with technical or limited subjects, historical or statistical. These monographs also partake to some extent of the nature of first-hand material, registering as they do the data of history close enough to the source to permit verification in ways impossible later. But they also belong to that constructive process by which history passes from analysis to synthesis. The process is a long and difficult one, however, and work upon it has only just begun. To quote an apt characterization, in the first stages of a history like this one is only ' picking cotton '. The tangled threads of events have still to be woven into the pattern of history ; and for this creative and constructive work different plans and organizations may be needed.

In a work which is the product of so complex and varied co-operation as this, it is impossible to indicate in any but

a most general way the apportionment of responsibility of editors and authors for the contents of the different monographs. For the plan of the History as a whole and its effective execution the General Editor is responsible; but the arrangement of the detailed programmes of study has been largely the work of the different Editorial Boards and divisional Editors, who have also read the manuscripts prepared under their direction. The acceptance of a monograph in this series, however, does not commit the editors to the opinions or conclusions of the authors. Like other editors, they are asked to vouch for the scientific merit, the appropriateness and usefulness of the volumes admitted to the series; but the authors are naturally free to make their individual contributions in their own way. In like manner the publication of the monographs does not commit the Endowment to agreement with any specific conclusions which may be expressed therein. The responsibility of the Endowment is to History itself—an obligation not to avoid but to secure and preserve variant narratives and points of view, in so far as they are essential for the understanding of the War as a whole.

J. T. S.

PREFACE

THIS account of Labour in the Munitions Industries during the war period is drawn from a very diverse set of sources. Largely, it is based on notes and memoranda compiled by the writer during the period under review, and on documents then collected for future reference. These have been supplemented from published official and other records, from files of newspapers and Trade Union journals, and especially from the immensely valuable collections of material in the possession of the Labour Research Department. In most of the events described, the writer, in his capacity as adviser to the Amalgamated Society of Engineers, was directly concerned, and he had, therefore, every opportunity of acquiring information from the Trade Union side. Of the official side he inevitably knows less, and of what was done by the employers, except in so far as it came out in joint conferences or was reflected in actual events, less still. The general impression which he retains of the whole war period is of a whirling succession of conferences and committees, understandings and misunderstandings, hurry and scurry in the midst of which the work somehow got done. 'When in doubt, create a committee,' was certainly the first precept of the times; and the second was, 'When a committee becomes troublesome, don't dissolve it; for that leads to further trouble. Gradually take away its functions, and let it die of inanition in its own time.' The path of war on the home front was strewn with discarded committees painfully dying, and often not quite sure whether they were still alive. I mention this because at certain points it accounts for a seeming incoherence in my narrative. Munitions policy was anything but coherent: it was a series of fits and starts, improvisations and expedients, 'hirings

and firings,' out of which an organization gradually emerged. I cannot say what became of this or that committee because nothing became of it. It slowly and silently withered away, because a better or at least a more favoured expedient had taken its place. Even the most meticulous writer cannot write with absolute clearness about incoherences such as were common in the organization of war-time industry.

I have done my best, not to write a definitive history, but to gather together the materials and impressions which must be gathered now if they are not to be lost altogether. The time for a definitive history is not yet ; for, in a very real sense, we are still living in the war period, and final judgements cannot be passed on processes which are still incomplete. For this reason I have kept my conclusions and deductions down to the *minimum*, and have stated them very briefly, accepting the mission of chronicler rather than historian. I have aimed at presenting the events in their succession, with the explanations necessary to an understanding of their significance. Valuation can only come later, when the working out of war-time tendencies in the world of post-war industry can be viewed more calmly and under more stable conditions than is possible at the present time.

G. D. H. COLE.

HAMPSTEAD,
March 1922.

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TRADE UNIONISM AND MUNITIONS

CHAPTER I

INTRODUCTORY

It has often been said that the idea of the 'class struggle' between 'Capital' and 'Labour' is unfounded, because 'Labour' is in fact composed of many classes. It cannot be denied that the difference between one grade of workers and another has, in fact, often approached the dimensions of a class distinction, and that the skilled and, comparatively, highly-paid workers have often tended to look down upon those workers who are less skilled and less highly paid. It has always been one of the principal contentions of the 'left-wing' elements in the Trade Union and Socialist movements that the evolution of capitalist industry is leading to a gradual obliteration of distinctions based on difference of grade and skill, and to an assimilation of the whole at least of the manual workers into a more or less homogeneous 'proletarian' order. For a long time past the increasing development of machinery has been leading to the supersession of the labour of highly skilled craftsmen by that of less skilled machine-minders; and although, owing to the rapid expansion in total production, this has not caused the number of skilled craftsmen to be reduced, there has undoubtedly been, over a long period, a fall in the proportion which they represent of the total labour force of industry.

The industrial developments which took place in Great Britain, under stress of the war emergency, between 1914 and 1918, both accelerated the operation of the tendencies already at work, and introduced important fresh factors. During these years a considerable change came about in the relations between the skilled and less skilled grades of workers, and in their attitudes one to the other. The skilled men, indeed, in face of the increased demands on production and the acute shortage of labour caused both by these demands and by the withdrawal of millions of men for military service, found themselves more indispensable than

ever, and in a stronger position for collective bargaining both with their employers and with the Government. But the rise in the status and economic position of the less skilled workers was, in some respects, even more remarkable, and the general result was a considerable narrowing of the gulf between them.

It is not easy to estimate how far, or how completely, the changes which were brought about under stress of war conditions are likely to be permanent. Certainly, there are elements in them which have, for the time at least, passed away with the passing of the conditions which brought them into being. But the change as a whole, once made, can hardly be gone back upon. The less skilled workers are unlikely to be thrust back again in the position of inferiority which they occupied before the War; and it is probable that, even where some of the changes brought about by war necessities seem already to have been undone, the undoing is only temporary, and the conditions which existed during the war period will, before long, recur, if not in identical form, at any rate in most of their essential features.

The fundamental cause of the changes in the relations of the various classes of labour during the war period was essentially simple. They resulted directly from the shortage of labour, the abnormal demand for human services in the industries which either ministered directly to war needs or were necessary for the maintenance of the 'home front'. Naturally, therefore, the change in the relations between skilled and less skilled workers was most marked in those industries in which the expansion, and, consequently, demand for labour, were greatest. Most of all, it affected the whole group of industries which was concerned with the provision of war munitions and equipment; but it re-acted also, in varying degrees, upon many other industries, and it is safe to say that there was hardly an industry in Great Britain which did not to some extent feel its effects.

The following study is largely, but not exclusively, concerned with the changes which the War brought about in the industries which were directly engaged in the supply of munitions of war. These, however, are largely typical of the general changes which occurred, although they represent them, of course, in their extremest phases, and although, in many other industries, the

alterations came about comparatively unnoticed, and with far less friction and public discussion.

Indeed, in the munitions industries considerable friction was inevitable from the very fact that the pre-war distinction between skilled and less skilled workers was, on the labour side, particularly marked. It is true that there existed in these industries before the War large and constantly increasing numbers of workers who were classified as semi-skilled; but the existence of this growing group actually served in some respects even to intensify the distinction between skilled and less skilled classes of labour. The skilled workers already felt their position to be threatened by the advancing tide of semi-skilled labour; and a struggle concerning the right of such classes of workers to be employed, and the right of employers to employ them, on certain types of machines and operations had, as we have seen, been proceeding in many departments of the engineering and kindred industries for a considerable period before 1914.

It will be easiest to get a clear picture of the nature of the changes which were brought about if we make the greater part of this book a direct study of their development in the munitions industries, and then attempt, in the concluding section, to indicate how far the lines of development were the same, and how far different, in certain other industries in which the relations between skilled and unskilled workers also underwent significant changes. To a great extent we shall find that the changes in the munitions industries were typical of the changes as a whole. Even where there were considerable differences in the actual course of events, it was still the development of 'dilution' in the engineering and kindred trades that was the main factor in the psychological change in the labour world as a whole. Consideration of the psychological aspect of the change is fundamental in the forming of any judgement upon its positive results.

For after all, the change which has come about in the relations between skilled and less skilled workers, although it has an economic phase, and is important in its economic content, is fundamentally a psychological change. What really makes it a change vitally affecting the future of industry and society is that it consists, above all, in a modification of the attitude of the

different grades of workers one to another. The skilled worker can no longer think of the less skilled workers quite as he was apt to think of them before the War, and the less skilled worker will no longer be conscious of the same subordination to the skilled workers. The less skilled classes of labour have secured a greater measure of recognition, and are more disposed to make considerable claims on their own behalf than they were before. Even if the immediate effect of these changes of attitude may be, under certain circumstances, an intensification of differences over particular issues between the two groups, nevertheless its fundamental effect is to draw the two groups more closely together, and to make more practicable effective joint action between them. It has thus helped to prepare the way for an inclusive movement embracing all grades and sections of workers.

In relation to the Trade Union world, these psychological changes may be regarded as a further stage in the process which began with the Dock Strike of 1889. The movement of the years 1888-9 in Great Britain, in which, for the first time since the Trade Unionism of the eighteen thirties, the less skilled workers demonstrated their capacity for combination and conducted successful industrial struggles in a number of industries, has always been recognized as a turning point in British Trade Union history. Any one who has read the contemporary comments of the older school of Trade Union leaders upon these movements of the 'eighties will remember that, in their eyes, the rise of organization among the less skilled workers could be only a mushroom growth, and one which was certain to disappear as soon as the temporary wave of unrest subsided. They simply did not believe in the possibility of stable combination among the less skilled grades of workers, who were not in the position to pay high contributions, or to build up Trade Unions which could serve them, not only as militant or protective industrial organizations, but also as continuous friendly societies assuring sickness and other provident benefits. The view of these older leaders was that stable Trade Union organization was only possible where the functions of Trade Union and Friendly Society were in this way combined, and that any organization which attempted to secure support solely on the strength of its power to aid its members in trade disputes would

collapse in times of depression, however successful it might be for a while on the crest of a wave of industrial unrest.

This attitude was clearly expressed by Mr. George Howell, one of the most prominent of the older Trade Union leaders, in his book *Trade Unionism—New and Old*. Mr. Howell remained to the end of his life sceptical of the possibility of stable Trade Union organization except on a basis of high friendly benefits and a conservative policy which would discourage strike action. As some of the 'new' Unions, founded about the time of the Dock Strike of 1889, declined in membership, or began to add some friendly benefits to the strike benefits which alone they had originally paid, Mr. Howell prophesied that the 'new' Trade Unionism would speedily either extinguish itself, or be driven to return to the old conservative methods which had characterized the Unions before the upheaval of the eighteen eighties. As the majority of the less skilled workers could not afford to pay contributions large enough to provide friendly benefits on any considerable scale, this was tantamount to prophesying the disappearance of most forms of organization among the less skilled workers. It is now easy enough to see that the view of the older leaders was largely wrong. It had, indeed, been proved wrong long before the War; as the rapid growth of combination among the less skilled workers during the quarter of the century following the Dock Strike of 1889 clearly showed. The less skilled workers did come permanently into the ranks of Trade Unionism; and their coming resulted, not only in a gradual opening to them of the ranks of many of the older Trade Unions, but also in a change of attitude throughout the whole Trade Union movement, no part of which wholly escaped the influence of their advent.

In consequence, however, of the lateness of their accession to the Labour movement, the less skilled workers became organized in those industries, such as building and engineering, in which strong craft Unions of skilled workers alone were already in existence, not in the same Unions with the various grades of skilled craftsmen but in separate Unions of their own—'general labour' Unions, as they have come to be called. Thus the process of assimilation was by no means completely accomplished; and the Trade Union movement in its new form included in

a considerable number of industries on the one hand a group of somewhat exclusive Trade Unions organizing only skilled craftsmen, and on the other hand a separate group, generally not confined to any single industry, organizing all and sundry among the less skilled grades of workers. When war broke out in 1914, although joint action had developed to a certain extent in most of the industries concerned between these two groups of Unions, the co-operation between them was by no means complete; and, where the less skilled workers' organizations were admitted to the counsels of the craftsmen's Unions, they were usually treated as possessing to some extent an inferior status.

The effects of this were seen during the War, and a good deal of the friction which accompanied the introduction of dilution and the substitution of one grade of workers for another on account of the shortage of labour is directly traceable to the segregation of the different types of workers in distinct and imperfectly co-ordinated Unions. War conditions compelled these Unions to recognize the need for more closely concerted action; but friction between them was also intensified in relation to a number of important questions. The Unions found themselves inevitably co-operating more than before; but difficulties often arose within the co-operating groups, and hard words were often spoken by the representatives of the one section against the attitude of the other.

The return to peace-time conditions of production at the end of the War was accompanied by a much more complete reversion to pre-war practices and methods of production than was anticipated by most of the prophets who wrote or spoke during the war period about the conditions of post-war workshop practice. To a large extent, the new methods introduced during the War disappeared with the cessation of the demand for the particular products for the manufacture of which they were introduced. Nevertheless, the less skilled worker by no means fell back to his pre-war position. He continued to regard himself, in the light of his experience during the War, as standing far more closely than ever before on an equality with the skilled craftsman; and the skilled craftsmen's organizations were also

compelled to accord to the less skilled workers' Unions a greater measure of recognition. Even a complete reversion to pre-war methods of production (and this is quite outside the range of practical possibilities) would not suffice wholly to undo the change in attitude which has taken place.

This change still preserves up to the present time (October 1922) a strong material basis in the substantial narrowing of the differences in wage rates between skilled and less skilled types of workers. This distinction arose directly from the manner in which wage advances were conceded during the War, both in order to meet the cost of living and on other grounds. We shall have to discuss more fully in a later chapter the war-time changes in rates of wages in certain occupations, and we need say here only that, broadly speaking, wage advances during the War were conceded on a flat-rate basis irrespective of the pre-war earnings or standard rates of the grades of workers affected by them. It is clear that if two men, of whom one had before the War a standard wage rate of 40s. and the other a rate of 20s., both receive, in face of the increased cost of living, an advance of 5s. per week, the proportionate difference between their respective standards of living is thereby diminished. And, if this process is continued over a considerable period of rising prices, and repeated advances to meet the rise in the cost of living are given on the same flat-rate basis, the original difference of 100 per cent. between them will be reduced to very much smaller proportions. A difference of 20s. in their wage rates will indeed remain, but if this 20s. is really only worth, in purchasing power, as much as, say, 10s. before the War, the real difference which it represents comes to be almost insignificant. This was, in fact, largely what occurred in the munitions industries, and in certain other occupations, in Great Britain during the war years.

I have spoken so far of skilled and less skilled workers, as if they consist of two groups, each completely homogeneous in itself. This, of course, is not really the case; for there are substantial differences even among the various crafts of skilled workers, and these differences are recognized by varying standard wage rates for different crafts and sections. Skilled workers

are also differentiated by varying eligibility, according to Trade Union practice, which may or may not have the sanction of collective agreement with the employers, to operate certain classes of machines or perform certain kinds of operations. Still more are there wide differences within the group which I have called less skilled ; for the workers included in this group range from comparatively skilled types of machine operators at the one extreme to the tenders of purely automatic machines, or to mere fetchers and carriers, at the other extreme. There are also the differences, very important indeed from the standpoint of war-time dilution, between the recognized status and remuneration accorded to men and women in the various branches of industry.

The process of ' dilution ' in Great Britain during the War was mainly, though by no means exclusively, a process of the substitution of the labour of women for the labour of men. The manhood of the nation was being drained away into the armed forces. Not only had the gaps thus created to be made good : it was also necessary greatly to extend the personnel of the industries directly ministering to war needs. The reservoir of fresh labour required was found for the most part among women ; for the Trade Unions constantly and successfully set their faces against the attempt to import from abroad coloured labour, which would have provided the only alternative supply that was available. In taking up this attitude, there is no doubt that the Trade Unions had behind them the support of public opinion. While, however, the principal fresh type of labour introduced into the war industries was women's labour, this does not mean that the processes of dilution and substitution consisted simply in the taking of men's places by women workers. The women usually, though not always, came into the industry at the bottom, and were set to work on the least skilled operations ; in some cases they worked their way up to comparatively skilled processes, and in a few, became fully skilled workers. Their entry at the bottom necessitated a constant process of ' up-grading '—a shifting up and adaptation to new jobs among all the grades of labour already employed in the industries affected. The available skilled workers had to be concentrated far more care-

fully than before on the most highly skilled types of work, and more and more of the less skilled workers had to be 'graded up', until every man, as far as was humanly possible, had been set to work on the highest class of job, required for war purposes, which he was capable of performing. There was, therefore, a constant sifting and shifting of workers in the war industries throughout the whole period. The same worker passed, in many instances, through a rapid succession of changes, working his way rapidly up the labour and industrial scale.

Broadly speaking, the first phase of dilution and substitution consisted mainly in an increase in the personnel of the munitions industries by the introduction of large numbers of new workers at the bottom, while the later phases consisted much more in a steady process of up-grading and more scientific utilization, from the standpoint of war requirements, of the supply of workers available. I am here dealing with the purpose which lay behind the process, and not with the rightness or wrongness of the methods by which those responsible for its execution sought to achieve their object. As this book will serve clearly to show, there are many respects in which it seems to me that the job of promoting the fullest utilization of the available supply of workers was neither effectively nor tactfully done. The general intention of those responsible is, however, clear enough; and it is the general intention only with which this introductory chapter is concerned.

I shall attempt then, before setting out upon an historical study of the changes in the relations of skilled and less skilled workers, to summarize in a few words the general character of the changes seen in retrospect. The word 'dilution,' which came to be applied to these changes in so far as they affected actual workshop practice, covered a number of different processes. It was used, at first, mainly with reference to the augmentation of the labour supply, that is to say, to the introduction of fresh workers into the munitions industries from outside. These workers came from many different sources: some from other industries and productive occupations for which there was less need or less urgent need under war conditions; some from commercial occupations or domestic service; many directly

from the home or the school ; a few from social classes whose members had not in normal times worked for their living. The great majority of them had no previous industrial experience which was directly of much service to them in adapting themselves to the conditions of the industries which they entered under stress of war needs. They had to be trained from the beginning, and to learn the new processes on which they were to be employed. Some, of course, had a previous factory experience either in the engineering industry itself or in some other industry ; and in some cases this previous experience was of considerable service in adapting them for jobs requiring a certain degree of skill. Broadly speaking, however, the fresh workers who were introduced began at the beginning, and learnt very quickly how to perform the comparatively simple operations upon which they were employed.

The second process which passed under the name of ' dilution ' is that which I have described earlier in this chapter as the process of ' up-grading ', that is to say, the transference of workers who already possessed an experience of the less skilled processes in the particular industry concerned, and were already employed on some less skilled process, to the performance of operations either requiring a higher and wider range of skill, or at any rate normally performed in previous times by workers possessing a higher and wider range of skill. Comparatively few ' dilutees ', as they came to be called, climbed to the highest and most skilled positions in any industry ; but to a very considerable extent the less skilled part of the work previously done by fully skilled workers was transferred to workers possessing a less degree, or a less wide range, of capacity.

Dilution, therefore, frequently resulted, not simply in the introduction of fresh workers on identical processes or in the ' up-grading ' of workers from one process to another, but also in actual changes in the methods of manufacture. Workshop operations and processes were, as the War proceeded, in many cases and to an increasing extent sub-divided ; and the more mechanical parts of operations which had previously been regarded as unitary jobs, requiring a high degree of skill, were taken away from the skilled workers and transferred to workers of a lower

grade. The labour of the skilled workmen was thus concentrated, not merely on the operations which before the War had been regarded as 'skilled men's work', but to an increasing extent on the most skilled parts of such operations. It was in connexion with this sub-division of operations that a great deal of the friction over the later stages of dilution arose. As we shall see later, special steps were taken, under the peculiar conditions of war-time production, to secure that piece-work prices should be, as far as possible, stabilized. This being so, the concentration of the most highly skilled labour on the most highly skilled process frequently meant that the earning capacity of the skilled man was reduced, or at any rate did not increase in proportion to, the increase in the earning capacity of the less skilled workers ; for the most remunerative jobs for the skilled piece worker before the War were very often those which required in fact the least skill, and therefore could most easily be speeded up. Cases therefore often arose in which the less skilled workers, whether they had been 'up-graded' or not, were able to earn, on repetitive machine processes, considerably more than the most highly skilled craftsmen, who found themselves occupied on work which was too difficult or delicate to be done, under any conditions, at a high speed. This was a very frequent cause of friction in the workshops, and one for which the officials of the Ministry of Munitions did not succeed, throughout the whole war period, in devising any satisfactory solution.¹

This introductory chapter has been designed merely to furnish a very general indication of the nature of the problems which arose between skilled and unskilled workers in the munitions industries during the war period, in consequence of the unprecedented demand for labour and the radical transformation of workshop practices which were made necessary by the demand for hugely increased production. In succeeding chapters I shall endeavour to give an account in outline of the pre-war position in the industries principally affected. It will then be necessary to describe briefly the stages and methods by which the principal changes were brought about. Having done this, I shall try to trace the changes in the Trade Union world which followed as

¹ For their failure to do this, see later, pp. 167 ff.

a result of the altered conditions. Then will follow a brief account of the parallel growth of 'substitution' in industries other than those directly concerned with the manufacture of munitions, and, finally, an attempt to estimate the general effect of the war-time changes as a whole. Throughout the major part of this monograph attention will be concentrated mainly upon the industries concerned in the supply of munitions; but it will be seen that the consequences of dilution in this sphere have largely affected the relations between skilled and less skilled workers through the whole range of industry and throughout the Trade Union movement.

CHAPTER II

THE 'MUNITIONS INDUSTRIES' BEFORE THE WAR

ALTHOUGH it is common to speak loosely of the 'engineering industry', and even of the 'engineering and shipbuilding industry', the occupations embraced under the name 'engineering' form in reality, not a single and well-defined industry, but a large group of more or less closely related industries, and have ramifications extending into almost every form of production and service. As modern industrial capitalism has developed, the group of occupations engaged mainly in the manufacture of machinery and implements has become more and more the pivot of the whole system of production. It is not, indeed, like mining or agriculture, a 'basic' industry, nor is the dependence of other services upon it so direct and immediate as in the case of transport; but it is the producer and maintainer of the plant and machinery by means of which almost all industries are carried on. It occupies the central position in production and is affected by any changes or fluctuations either in the industries which it supplies, or in those from which it draws its material, as well as by almost every new method of production that is anywhere introduced. Even more powerfully does its development affect the development of almost every industry.

The name 'engineering' may bear either a wider or a narrower significance. In the following study it is usually employed in a very wide sense; for the whole group of trades and occupations concerned with working on metals was vitally affected by the changes in the demands for production which were brought about by the War. The technique of the different branches of metal working presents many essential features of similarity; and the war-time changes reacted, broadly speaking, in much the same way throughout the whole of the 'engineering industry' in the widest sense of the term. This, indeed, was not the case

with the metal-working trades, which are concerned with the manufacture of metal itself. The iron and steel trades, and the rolling mills and tin-plate mills which are closely connected with the iron and steel industry, possess an essentially different technique, and could not be made susceptible to the forms of dilution and substitution of labour which were applied throughout the whole range of trades and industries concerned in the making of castings, machinery, and other finished metal goods. These, therefore, are only dealt with to a very small extent in the following study, which relates mainly to the huge group of trades engaged in working up the products of the iron and steel and kindred trades into the form of machinery or other finished products. In defining the limits of this great group of industries, the handiest classification to adopt is that of the British Census of Production, which divides it into sections or sub-groups according to the type of product which is being produced. On the opposite page is the actual classification table, showing the numbers employed in various branches of metal work during the year 1907.

It should be noted that the table in the text includes, not only the group of engineering and kindred industries in which the processes of dilution and substitution were mainly centred, but also those which are engaged in the manufacture of metal itself. The numbers given therefore include those who are engaged in the manufacture of iron and steel, and of the various finished products made in iron and steel works, rolling mills, tin-plate works, tube and wire factories, &c. In order, therefore, to arrive at a figure representing the membership engaged in engineering, shipbuilding, and kindred metal industries, apart from iron and steel manufacture and the trades associated with it, it is necessary to make a considerable deduction from the total figures given in the table. Unfortunately the Census of Production was taken in such a way as to make an accurate delimitation on these lines impossible; for foundries, which fall within the 'engineering' group in the other sense of the term, are included in the Census of Production tables under the same heading as smelting and rolling. On the other hand, both the employers' associations and the Trade Union societies organizing these sections of industry are, on the whole, clearly distinct. It is impossible to say, on

CENSUS OF PRODUCTION

IRON AND STEEL, ENGINEERING, AND SHIPBUILDING TRADES

<i>Trade</i>	<i>Persons employed. (Except out-workers.) Average</i>	<i>Net output per person employed. (Excluding out-workers)</i>
<i>(a) Private Firms</i>		£
Iron and Steel Trades (Smelting, Rolling, and Founding) .	261,666	115
Tin-plate Trade	20,628	97
Wrought Iron and Steel Tube Trade	20,223	108
Wire Trades	18,329	116
Anchor, Chain, Nail, Bolt, Screw, and Rivet Trades .	28,024	83
Galvanized Sheet, Hardware, Hollow-ware, Tinned and Japanned Goods, and Bedstead Trades	74,777	87
Engineering Trades (including electrical engineering) .	461,703	109
Shipbuilding and Marine Engineering Trades—Private Firms	188,312	98
Cycle and Motor Trades	54,043	109
Cutlery Trades	14,831	73
Tool and Implement Trades	23,711	88
Blacksmithing Trades	20,889	71
Needle, Pin, Fish-hook, and Button Trades	13,252	64
Lock and Safe Trades	7,922	82
Small Arms Trade	4,855	111
Heating, Lighting, Ventilating, and Sanitary Engineering Trades	14,322	109
Railway Carriage and Wagon Trades	28,857	123
	1,250,344	—
<i>(b) Railways and Government Depts.</i>		
Railways (Construction, Repair, and Maintenance of Per- manent Way, Rolling Stock, plant, &c.)	241,850	71
Royal Ordnance Factories	14,533	100
Naval Ordnance Department	1,118	69
Shipbuilding—Government Yards and Lighthouse Au- thorities	25,580	97
	283,081	—
METAL TRADES, OTHER THAN IRON AND STEEL		
Copper and Brass Trades (Smelting, Rolling, and Casting)	21,448	137
Finished Brass Trades	38,196	89
Gold and Silver Refining Trade	2,187	197
Lead, Tin, Zinc, and other Metal Trades (except iron, copper, brass, gold, and silver)	8,233	133
Plate and Jewellery Trades	38,388	94
Watch and Clock Trades	5,301	72
	113,753	—
Grand Total	1,653,178	—

the basis of the Census of Production tables, what proportion of the workers there included under iron and steel trades (smelting, rolling, and founding) are to be regarded as foundry workers, and what proportion as belonging to the iron and steel industry. The workers employed in the tin-plate, wrought iron and steel tube, and wire trades clearly belong rather to the iron and steel group than to the engineering and kindred industries. A total deduction of 250,000 from the figure at the end of the table quoted will probably be not far from accurate. This will leave a total for 1907 of rather over 1,400,000 workers employed in the group of industries with which we are dealing. The total would be somewhat higher if all the small workshops, which were not in all cases included in the Census of Production, were taken into account.

There are no strictly parallel figures which can be put side by side with the figures of the Census of Production to show the numbers employed in this group of industries at any later time. Certain intricate figures can, indeed, be drawn from the Population Census of 1911, which in its occupational volumes bases its classification, not so much upon the product on which a worker is engaged, as upon the actual craft or calling which he follows. The figures therefore are not fully comparable; but the occupational volumes of the Census of 1911 enable us to gain an approximate idea of the numbers then employed in the engineering industry in the widest sense. It should be noted that the scope of the Census of 1911, which included the whole population, is a good deal wider than that of the Census of Production. For, in the first place, the 1911 figures include all the workers employed in small workshops, of which there are still a good many left, especially in the minor metal trades. Moreover, they include all the workers in the industry, whereas the Census of Production was concerned only with persons who were actually employed at the date when the survey was taken, and thus omitted the whole of the unemployed workers. The percentage of unemployed in the engineering trades, according to the figures returned by the engineering Trade Unions to the Board of Trade, stood in 1907 at 4.9.

The following table, abstracted from a number of tables

contained in the Census volumes, gives the nearest approach to a conclusion that it is possible to draw as to the personnel employed at that time in the engineering industries in the widest sense. The figures, however, are not in themselves at all conclusive, and admit of a considerable margin of error.

CENSUS 1911

GREAT BRITAIN

NUMBER OF WORKERS EMPLOYED IN ENGINEERING AND METAL INDUSTRIES

	<i>Trade</i>	<i>Number of Workers Employed</i>
<i>Iron and Steel Manufacture :</i>		
Pig-iron Manufacture (Blast Furnaces)	.	24,430
Puddling-furnaces ; Iron and Steel Rolling Mills ; Tube Manufacturers	.	76,820
Steel—Manufacture, Smelting, Founding	.	48,160
Wire—Drawers, Makers, Workers, Weavers	.	22,685
*Tin-plate—Manufacture	.	22,886
		<u>194,981</u>
<i>Electrical Workers :</i>		
Electrical Apparatus Manufacturers	.	94,863
<i>Shipbuilding :</i>		
Boilermakers	.	57,037
Platers, Rivetters, &c.	.	47,052
Other Shipworkers in Iron	.	10,010
Shipwrights	.	34,254
Other Shipworkers in Wood	.	5,693
Ship-Painters ; undefined shipyard labourers ; others	.	48,849
		<u>202,895</u>
<i>General Engineering ; Machine Making :</i>		
Patternmakers	.	17,253
Millwrights	.	5,580
Ironfounders	.	126,995
Brassfounders	.	12,807
Blacksmiths, Strikers	.	123,972
Erectors, Fitters, Turners	.	172,993
Brassfinishers	.	14,503
Coppersmiths	.	5,929
Toolmakers : File and Saw Makers	.	34,733
Metal Machinists	.	41,608
Labourers—for Erectors, Fitters, Turners, and undefined	.	37,454
Other workers in Manufacture of Textile Machinery Fittings and other Engineering work	.	139,479
		<u>733,306</u>

* England and Wales only; for Scotland see under Minor Metal Trades.

	Trade	Number of Workers Employed
<i>Minor Metal Trades :</i>		
Manufacture of Tinplate, * Galvanized Sheet, Copper, Zinc, Brass, Bronze, and other metals		15,121
Lead Manufacture		1,050
Type, Dies, Medals, Coins, &c. ; Roller Engravers, &c.		6,618
Arms Manufacture		7,119
Cutlers and Scissor Makers		15,458
Needle, Pin—Makers		5,095
Steel Pen Makers		4,492
Nail Manufacture		4,469
Bolt, Nut, Rivet, Screw, Staple—Makers		18,595
Anchor, Chain—Manufacture		6,749
Stove, Grate, Range, Fire Iron—Makers		11,188
White Metal, Plated Ware Manufactures ; Pewterers		16,936
Tin-plate Goods Makers		29,787
Copper Workers		1,968
Leadens Goods Makers		1,778
Zinc Workers		851
Brass, Bronze—Workers		20,207
Iron Workers, undefined ; other Iron Goods Makers		47,297
Bedstead Makers, Iron and Brass, Lock Key—Makers ; Gas Fittings— Makers ; Lamp, Candle-stick—Makers ; other Metal Workers		48,794
		<u>263,572</u>
<i>General Mechanics :</i>		
Artisans, Mechanics, Apprentices (undefined)		11,627
Machinists, Machine Workers (undefined)		2,148
		<u>13,775</u>
<i>Precious Metals and Jewellery :</i>		
Goldsmiths, Silversmiths, Jewellers		24,800
Lapidaries, &c.		1,556
		<u>26,356</u>
<i>Watches and Scientific Instruments :</i>		
Watchmakers ; Clockmakers		10,625
Scientific Instrument Makers ; Opticians ; Photographic Apparatus Makers		8,479
Weighing and Measuring Apparatus—Makers		9,597
Surgical and Dental Instrument and Apparatus Makers		8,096
		<u>36,797</u>
<i>Musical Instruments, &c. :</i>		
Piano, Organ—Makers		12,046
Other Musical Instruments—Makers		1,752
Fishing Tackle, Toy, Game Apparatus—Makers		11,101
		<u>24,899</u>

* Scotland only ; for England and Wales see under Iron and Steel Manufactures.

<i>Trade</i>	<i>Number of Workers Employed</i>
<i>Vehicle Building :</i>	
Railway—Coach, Wagon Makers	39,566
Cycle Makers	32,282
Motor-car Chassis Makers ; Motor-car Mechanics ; Motor-car Body Makers	52,009
Coach, Carriage—Makers	22,344
Wheelwrights	17,471
Tram-car Makers ; others in Construction of Vehicles	7,884
	<hr/> 171,556
Grand Total	1,763,000

The third source from which it is possible to derive figures showing the numbers employed in the engineering and kindred industries is to be found in the returns made under Part II of the National Insurance Act of 1911. Two of the industries selected for compulsory Unemployment Insurance under that Act were 'engineering' and the 'foundry trades'. These do not include by any means the whole of the sections of workers employed in the whole range of metal-working occupations described above, even apart from those engaged (in the iron and steel and kindred industries) in the actual manufacture of metal. They represent, however, the main groups of workers to whom the method of dilution was extensively applied during the war period.

The returns under Part II of the National Insurance Act show that in July 1914, 811,288 workers were insured on account of belonging to the engineering and foundry trades. Some indication of the amount of fresh labour introduced into these trades during the war period can be obtained by a comparison of these returns under the Insurance Act with the returns for subsequent years. The table on page 20 shows the growth in the numbers compulsorily insured under the Act of 1911, and also the effect of the extension of compulsory Unemployment Insurance which took place during the War under the Munition Workers' Insurance Act of 1916. This Act is estimated to have brought approximately 421,000 additional workers within the scope of compulsory insurance against unemployment.

We may thus conclude, on the basis of the foregoing figures,

THE ' MUNITIONS INDUSTRIES '

NUMBERS INSURED (ENGINEERING AND FOUNDRIES)

	1914	1915	1916	1917	1918	1919	1920
Jan.	.	730,785	804,002	1,045,982	1,266,731	1,386,833	1,295,308
Feb.	.	730,785	846,009	1,118,545	1,326,265	1,412,693	1,295,308
Mar.	.	730,785	846,009	1,118,545	1,326,265	1,412,693	1,295,308
Apr.	.	741,855	846,009	1,118,545	1,326,265	1,412,693	1,386,534
May	.	741,855	897,457	1,216,640	1,380,165	1,412,693	1,386,534
June	.	763,731	920,945	1,216,640	1,380,165	1,412,693	1,386,534
July	.	763,731	953,451	1,216,640	1,380,165	No Figures	1,398,312
Aug.	.	758,093	953,451	1,270,193	1,440,754	"	1,398,312
Sept.	.	820,850	1,007,272	1,270,193	1,440,754	"	1,398,312
Oct.	.	828,988	1,007,272	1,270,193	1,440,754	"	No Figures
Nov.	.	838,185	1,007,272	1,266,731	1,386,883	"	"
Dec.	.	771,758	1,045,982	1,266,731	1,386,883	"	"
Monthly Average	.	753,325	942,928	1,199,631	1,373,496	1,408,383	1,360,051

that the whole group of trades to which dilution became principally applicable during the War employed before its war-time expansion approximately 1,500,000 workers. The employment of women, while it was by no means unknown in these trades before the War, had assumed on the whole only very small proportions, and was largely confined to a comparatively narrow range of processes. There was also considerable difference between one district and another in the matter of women's employment; and, so far as the engineering trades proper were concerned, the mass of the women employed were confined to a comparatively small area in Birmingham and the Black Country. The vast influx of women workers into the munitions industries during the War was thus, so far as the greater part of the country was concerned, a profound revolution of workshop practice and was accompanied with a good deal of scepticism, on the part of employers as well as workers, as to its chances of success. The severity of the revolution was of course mitigated, not only by the fact that women were only introduced gradually; but also by the fact that, in the earlier stages of dilution, this introduction took place mainly in connection, not with established forms of production which were already in general operation before the War, but with new forms of production which were introduced for the manufacture of special war products, particularly shells, fuses, and cartridge cases. What is here said of the employment of women does not, of course, apply to the less skilled types of male labour. The substitution of less skilled for fully skilled apprenticed men had been proceeding steadily for many years before the War, accentuated by every development in mass production and in the standardization of machinery and product. These changes were already, before the War, affecting profoundly the position of the skilled workers and creating new problems of industrial organization. They are more fully discussed in the next chapter, in connexion with their effects on the form and structure of Trade Unionism in the metal industries.

Having ascertained, with as much accuracy as seems possible, the total numbers employed in the engineering and kindred industries, we have now to see how and how far in 1914 these various

classes of labour were organized in Trade Unions. Here we are at once confronted with two considerable difficulties. In the first place, the Trade Unions closely connected with engineering work were organized for the most part not on an industrial but on a craft, or kindred craft, basis. That is to say, they aimed at enrolling, not the whole of the workers whose employment was necessary for the manufacture of any particular product or type of product, but the whole of the workers possessing a common skill or training, irrespective of the product or type of product on the manufacture of which they were engaged. Thus, the Unions of skilled engineers, while the great bulk of their membership was employed in the engineering and kindred industries, that is, in the forms of metal work with which we are primarily concerned, had also considerable numbers of members employed in all manner of other industries, largely on the upkeep and operation of machinery and plant produced by the engineering group. Enrolled in their ranks were sea-going engineers, millwrights, and other 'maintenance' workers employed in textile and other factories, flour mills, and all manner of productive establishments; a certain number of colliery mechanics; the mass of the skilled metal workers engaged in the manufacture and repair of locomotive and railway stock in the great railway workshops at Crewe, Swindon, Derby, and other centres; other railway mechanics scattered up and down the lines of the various railway companies in the small repair sheds; electrical engineers in all manner of undertakings; and so on. It is not easy to form any estimate at all of the percentage of members in the engineering Trade Unions who were, in one of these ways, or in some similar way, employed outside the range of the engineering and kindred industries. Nor is it possible to draw any accurate line showing the delimitation of the engineering industries from other industries engaged in various types of constructional work. Thus, a good many engineers were employed in building operations, and it depended almost on accident whether these workers, being employed by a building contractor, were classified as belonging to the building industry, or, being employed by a constructional engineering firm, were regarded as belonging to the engineering industry. These instances serve to show the great complexity of engineering organization; but, despite the

numerous exceptions, there is no doubt that the great majority of the members enrolled in the engineering craft Unions were engaged on types of production which fell within the group of industries with which we are mainly concerned.

Even before the War, however, a very large number, but one which it is quite impossible to determine accurately, of the Trade Unionists engaged in the engineering and kindred metal industries were organized, not in Trade Unions having any direct or exclusive relation to engineering, but in Unions which set out to organize indifferently many types of workers in many different industries and occupations. These Unions, usually referred to as 'general labour' Unions, consisted mainly of two groups of workers. They included, in the first place, the whole of the organized employees in numerous scattered or less organized industries and occupations, where no strong Union on a 'craft' or 'industrial' basis was in existence. Secondly, in a number of important industries, of which engineering was, even before, the most important, they included all or the majority of the less skilled workers who were enrolled in any Trade Union at all. Broadly speaking, it is true to say that a 'general labour' Union was, and is, prepared to enrol any employed person, except in face of a strong enough objection based on the existence of a powerful and recognized craft or industrial Union which would keenly resent its interference.

During the years immediately preceding the outbreak of War, the general labour Unions had been growing very rapidly indeed. The table on page 24, which shows the growth of the more important among them during the period from 1901 to 1914, shows the extent to which, even before the War, the less skilled types of workers were being rapidly brought within the scope of Trade Union organization.

Although these Unions are usually referred to as representing the less skilled types of workers, it will be seen that this is not, especially in recent years, an accurate or exhaustive description of the types of workers enrolled in them. It is, broadly speaking, true as far as the engineering industry proper and the other principal branches of metal work are concerned; for in these industries there exist strong Unions enrolling practically all

MEMBERSHIP OF GENERAL LABOUR UNIONS, 1901-14

	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914
Dock, Wharf, Riverside, and General Workers' Union	13,929	12,357	12,357	12,373	11,908	12,023	13,202	13,262	15,740	18,240	55,000	40,229	48,060	47,000
*Gasworkers and General Labourers, National Union of	46,014	40,986	31,783	29,631	28,120	33,680	39,805	32,317	31,735	32,040	76,889	82,135	134,538	110,073
†Gasworkers, Brickmakers, and General Labourers, Amal. Soc. of	4,205	4,136	4,377	3,601	3,493	4,120	4,179	3,792	3,400	3,805	5,649	7,146	14,420	12,881
Labour, National Amal. Union of	22,094	21,451	19,287	17,173	17,370	20,514	22,411	16,543	16,657	16,017	44,396	49,972	60,003	55,453
Labourers' Union, National Amal.	3,627	3,189	3,058	3,174	2,085	2,200	3,154	3,195	3,166	3,549	5,380	5,065	5,862	5,164
‡Warehouse and General Workers' Union, National	—	—	—	—	—	—	—	—	—	—	6,000	4,016	5,076	6,188
Women Workers, National Federation of	—	—	—	—	—	2,200	2,300	2,714	3,500	6,046	10,176	10,255	12,152	10,164
Workers' Union	1,738	1,182	1,105	1,253	1,390	2,050	5,170	4,300	4,500	5,016	18,500	22,644	91,000	159,600

* Since 1915 known as National Union of General Workers.

† After 1915 known as Amalgamated Society of Gas, Municipal, and General Workers.

‡ Till 1912 known as Amalgamated General and Warehouse Workers' Union.

[Sources of figures :

1901-10—Board of Trade Reports on Trade Unions.

1911-14—Reports of Chief Registrar of Friendly Societies on Trade Unions.]

the skilled workers who are organized at all. But in many of the smaller and more scattered trades and industries, including a few of those concerned in metal-working, the general labour Unions had even before the War enrolled a proportion which was by no means insignificant of the more skilled types of workers employed. The general labour Unions were thus responsible, not only for the organization of the less skilled workers in a large group of industries, but also for the complete organization of a number of small and scattered industries in which, as a rule, the distinction between skilled and less skilled workers was far less marked than in the comparatively highly organized engineering group.

These general labour Unions, as a whole, at any rate before the War, had no accurate knowledge of the actual employments in which their members were engaged, and would not have been in a position to compile any statistics showing the numbers of workers in the engineering or metal trades whom they had enrolled. Nothing more than a guess is therefore possible at this figure; but it is probable that if we say that the general labour Unions had, in the whole range of metal trades which we are now considering, once more excluding the iron and steel industries and the tin-plate and rolling mills, a membership somewhere in the region of seventy-five thousand, this estimate will not be wildly inaccurate. Of these seventy-five thousand, a considerable number were shipyard labourers, who, in Scotland and the north of England, were organized mostly in the National Amalgamated Union of Labour, and, in other centres, in the National Union of General Workers.

In addition to the engineering craft Unions and the general labour Unions, a number of other Societies have to be taken into account in order to arrive at any general figure showing the extent of Trade Union membership in the industries under discussion. Thus, in the shipyards, and to a less extent in the engineering shops, there were large numbers of workers belonging to trades and to Trade Unions which were mainly connected, neither with engineering nor with the metal group at all, but with other industries. By far the most important of these other workers belonged to the group of trades occupied mainly in the

MEMBERSHIP OF THE PRINCIPAL ENGINEERING UNIONS—*continued*

<i>Name of Society</i>	<i>1913</i>	<i>1914</i>	<i>1915</i>
E. Patternmakers :			
Patternmakers	8,477	8,652	9,019
F. Ironfounding :			
Friendly Society of Ironfounders	26,279	25,225	23,348
Associated Ironmoulders	8,559	7,932	7,703
Central Ironmoulders	6,170	6,297	4,508
General Iron Fitters	1,800	1,780	1,800
Coremakers	2,527	2,485	2,767
Amalgamated Moulders	2,085	1,930	1,343
Associated Moulders	423	483	458
Iron, Steel, and Metal Dressers	1,990	2,000	2,750
Iron, Steel, and Brass Dressers of Scotland	1,396	1,348	1,654
Stove, Grate, Fender, and General Light Metal Workers	2,973	2,580	2,990
G. Shipbuilding :			
Boilermakers	66,288	67,288	72,884
Shipwrights	26,719	28,268	29,563
Sheet Iron Workers	968	1,024	1,025
Liverpool Shipwrights	890	1,000	1,000
Barge Builders	386	388	390
Chatham Government Labourers	1,574	—	2,000
Portsmouth Government Labourers	1,616	—	3,390
Devonport Government Labourers	1,012	—	2,000
H. Sheet Metal Workers :			
National Amalgamated Sheet Metal Workers :			
General Union	2,351	2,469	2,649
Galvanized Hollow Ware Workers	1,324	1,330	1,202
Others	5,604	6,240	7,074
Birmingham Operative Tin Plate Workers	2,183	2,427	2,525
Progressive Sheet Metal Workers (Coventry)	143	146	116
I. Textile Machinery :			
Spindle and Flyer Makers	1,139	1,282	1,248
Shuttle Makers	534	502	534
Mule and Ring Spindle Makers	255	259	203
Woolcomb, Hackle, and Gill Makers	231	—	—
Block, Roller, and Stamp Cutters	389	393	379
J. Labourers :			
Heywood Union of Machine and General Labour	260	260	263
K. Miscellaneous :			
Machine, Engine, and Iron Grinders, and Glaziers	714	730	720
Scottish Machine, Engine and Iron Grinders, and Glaziers	90	91	47
Heating and Domestic Engineers	1,771	1,552	1,869
Grand Total	427,730	455,288	516,262

A glance at the above table will serve to show that, large as the number of Unions in the engineering and kindred industries was, a comparatively small number of Societies had enrolled a large enough proportion of the total membership to exercise a preponderating influence on policy. By far the largest single Society was the Amalgamated Society of Engineers, which now, in 1920, has carried through an amalgamation with a considerable number of other Societies included in the foregoing table, and has thus become the nucleus of a more inclusive body, the Amalgamated Engineering Union. This Society was, before the War, nearly three times as large, and is now (1921) considerably more than four times as large as the next biggest Union included in the table. In all matters of policy relating to the engineering industry in the narrower sense, the Amalgamated Society of Engineers was, both before the War and throughout the war period, by far the most influential organization; and its attitude on all questions of policy very largely determined the course followed by the smaller Societies. The weaker Unions, despite a certain amount of bickering, as a rule either formulated their policy in conjunction with the A.S.E. or were compelled to follow its lead. In the shipyards, apart from marine engineering, which was also dominated by the A.S.E., a similar rôle was filled by the United Society of Boilermakers and Iron and Steel Shipbuilders, which worked in very close conjunction with the two next most important Societies concerned with shipyard metal work. These were the Ship Constructors' and Shipwrights' Association, and the Associated Blacksmiths' Society. These three bodies formed, after the War, a partial amalgamation under the title of the Amalgamated Union of Shipbuilding, Engineering and Constructional Workers. This arrangement, however, has now, for the time at least, broken down.

The third largest Society, the Friendly Society of Ironfounders, was much the most important Trade Union in the foundry trades. Its influence was, however, more limited than that of either of the foregoing Societies, both because it did not extend to Scotland, where two separate Societies were in existence, and because it did not effectively regulate, or even attempt to regulate, the trades concerned with the production of light castings, which were organized in Scotland mainly by the Central Iron Moulders'

Association, and in England by the National Union of Stove, Grate, Fender, and General Light Metal Workers (now the National Union of Light Metal Trades).

In the brass and copper trades the position was somewhat more complicated. Brass and copper workers employed in general engineering shops, or in conjunction with large bodies of engineers, were enrolled sometimes in the general engineering Unions such as the A.S.E., and sometimes in the separate Trade Unions included in Group C of the foregoing table. A considerable part of the brass trades, however, was carried on, not in close conjunction with engineering, but as a separate industry, particularly in Birmingham and the Midlands. The great majority of the workers employed in this distinctively brass-working industry were organized in the National Society of Brass Workers and Metal Mechanics, which had also a not inconsiderable membership among the brass workers employed in general engineering establishments.

In the electrical group, the only Society of importance was the Electrical Trades Union; but a considerable number of skilled electrical mechanics were organized in the general engineering Societies, such as the A.S.E., and of the less skilled workers, especially in the electrical power stations, large numbers were organized in the National Amalgamated Union of Enginemen and smaller Societies of enginemen and boilermen, while the labourers were for the most part enrolled in the various general labour Unions.

Two of the Societies catering for smithy workers were important. The Associated Blacksmiths, as we have seen, had their main strength in the shipyards. The other Society of importance, the United Kingdom Society of Smiths and Strikers, has since been merged in the Amalgamated Engineering Union. This Union has its main strength in the engineering shops properly so called. The Amalgamated Society of Engineers had also a considerable membership among smiths, and the less skilled workers in the smithies were again partly organized in the general labour Unions.

Patternmakers were divided between the United Pattern Makers' Association and the general engineering Unions, while a certain number of patternmakers belonging to the light castings

industry were also organized in the National Union of Stove, Grate, &c. Workers.

Sheet metal working, that is to say, not the manufacture of tin-plate but its working-up into finished commodities, was integrally connected with general engineering work mainly through the motor and cycle trades, and also through shipyard work. The Unions organizing this class of workers fell into two groups. On the one hand, there was the group included in the National Amalgamated Sheet Metal Workers and Braziers, which was a close federation embracing not only a number of purely local Societies, but also one Society, the General Union of Braziers and Sheet Metal Workers, the branches of which extended over a considerable portion of the north of England, and, in addition, a few small branches directly formed by the National Federation itself. Outside this group, the only body of importance was the Birmingham Operative Tin Plate, Sheet Metal Workers', and Braziers' Society, which was confined to Birmingham and the Black Country.

The separate Unions concerned with textile machinery were not, in any instance, important, the great mass of the mechanics employed in this class of work being enrolled in the general engineering Societies. There had been, during the years before the War, a constant process of absorption of the small and usually localized Societies of textile mechanics with the general engineering Unions.

In order that the account of pre-war Trade Unionism in the group of industries with which we are dealing may be as far as possible complete, it is necessary to add to the foregoing table, which deals only with the major groups more or less closely related to general engineering, the small numbers of workers in the minor metal trades who were in distinct Trade Unions of their own. The Unions in these groups were all very small; and, while some of them had an effective control over conditions in the particular trades with which they were concerned, their influence on the wider movement was inconsiderable. The difficulty of obtaining accurate figures showing the membership of these small Societies makes a detailed table impossible. Probably the total number organized, apart from the numbers in the general labour Unions, did not reach 20,000.

CHAPTER III

WHAT DILUTION WAS

IN the foregoing chapters, dilution will necessarily be described for the most part from a purely external point of view. The negotiations which led up to and accompanied its extension will be dealt with, and the measures taken, by the regulation of wages, by prescribing the procedure to be followed, and so on, will be explained. But all this historical account will inevitably give only an imperfect impression of the nature or effects of the change itself; and in this chapter an attempt must be made to give an account, at least in general outline, of what the change known as 'dilution' actually was.

Broadly speaking, the development of the engineering and kindred industries, since their virtual institution in the course of the 'Industrial Revolution', has been, far more markedly than in most other industries, towards a greater specialization of both labour and machinery. This development, however, has not been simple or uniform, and its character cannot be even indicated by any single phrase. The first stage was the substitution for the 'millwright'—the all-round skilled mechanic trained in all the main branches of engineering work—of a number of more specialized skilled craftsmen, fitters and turners, pattern-makers, millers, and so on. But even this process was accomplished anything but uniformly, the newer specialized crafts being evolved rather by a change in the character of apprenticeship, by which the range of skill open to the ordinary apprentice to acquire was gradually narrowed, than by any positive training for the new crafts. Gradually the apprentice came to acquire skill, and to be given the opportunity to acquire skill, only within a steadily narrowing range of processes, and gradually he came to describe himself by the name of that particular form of skill which he had acquired during his period of training. Even to-day this process is by no means complete. Very many engineers are fully skilled both as fitters and as turners, and not a few have

some experience of the drawing office as well as of the workshop. But the real all-round mechanic has almost disappeared, except from certain special branches of industry ; and, of the main body of skilled men, only a decreasing proportion possess a wide range of experience in different crafts.

While this first phase, specialization of the millwright into a number of skilled crafts, was proceeding, the development of machinery itself, although it was proceeding rapidly, was not the dominant factor from the labour point of view. The more specialized crafts required, not so much a less degree as a less wide range, of skill. This meant, no doubt, that the period required for training was to some extent shortened ; but it did not mean that the work of the skilled crafts could be done by men who had not passed through a considerable period of apprenticeship. Accordingly, the change did not as yet appear to menace directly the position of the skilled man, or to threaten him with submergence beneath a torrent of unapprenticed labour. It is true that some skilled men considered, even at this stage, that the craftsmanship of the industry was being degraded by the supersession of the millwright. In a real sense they were right ; but the practical consequences of the change for the skilled men themselves were not sufficiently obvious to provoke a strong movement of opposition.

In the second phase, which in time largely overlapped the first, the course of evolution is not so much directly in the labourer as in the machines which he is called upon to operate. The development of machinery, of course, reacts at once upon the worker, and produces a further disintegration of craftsmanship. But, whereas in the earlier phase it was the specialization of the craftsman that was important, now in this phase it is the specialization of the machine, and the substitution, over a considerable and growing range of operations, of ' machine skill ' for human skill.

In this phase the principal machine employed in the engineering industry, the ' centre lathe ', gives birth to a number of adaptations of itself, specialized machines capable of use only for a few of the many operations which the centre lathe can be employed by a skilled man to perform. At first the majority

of these more specialized machines also require for their working a high degree of skill, but of a far narrower range than the skill called for from a fully skilled turner operating a centre lathe. Thus, there comes into being a whole group of specialized skilled machine crafts—millers, planers, borers, slotters, and the rest.

The new machines are, at this stage, in the organized Trade Union shops at least, still mainly operated by skilled men who have passed through a form of apprenticeship. But apprenticeship itself is being steadily degraded; and, against the will of the Trade Unions, a form of grade division is growing up between the new classes of skilled machine operators and the class of fully skilled men belonging to the grades of fitters and turners and so on. Gradually, in some areas, this distinction is recognized by the acceptance of a lower standard rate of wages for certain grades of skilled machinists than for the fully skilled crafts; and rates are fixed for borers, slotters and, in some cases, millers, at so much (often 2*s.* a week) less than the full district rate for skilled workers.

Meanwhile, the evolution of machinery is proceeding further. The specialization of machines is being carried further in the direction of the 'single-purpose' machine. Moreover, there is a growing tendency to embody in the machine itself more and more of the skill previously demanded of its operator. The machine becomes semi-automatic. The job upon it still probably requires to be 'set-up' by a fully skilled man; but, that once done, as long as it is used for 'repetition work', that is for making a number of the same article, or performing a 'run' of an identical process, the amount of skill required for its actual operation is relatively small. This form of machine gives birth to the semi-skilled machinist, a grade or group of grades, inferior to the specialized skilled machinists described above.

For a time the Trade Unions seek to maintain the principle that all machines must be operated by skilled men. But this is an impossible demand, not only because the new machines manifestly do not call for a high degree of skill, but also because the really skilled man would probably refuse with scorn to spend his life operating one of them, even at the full district rate of wages. The semi-skilled machinist, recruited from the ranks of

unskilled workers, therefore comes as a new force into the industry. At first the skilled workers' Trade Unions ignore the new classes of labour, and refuse to admit them to their ranks. Gradually they begin, in some cases, hesitatingly to admit them (as in the Machinists' Section of the Amalgamated Society of Engineers); but the great majority of them are left unorganized until the coming of the general labour Unions, although many of the more skilled types of machinists become organized in such new Societies as the United Machine Workers' Association and the Amalgamated Society of General Toolmakers.

The process of machine development does not stop short with the semi-automatic machine, but advances from it to the fully automatic, or 'fool-proof' types. These machines are operated partly by unskilled adult male labour, but also largely in some districts, and especially in the western Midlands, where they develop most rapidly, by unapprenticed boys, girls, and women. In connexion with most of these machines, the skilled man still retains his function as a 'setter-up'; and his labour is also largely required for the making of them, and of the tools for them. The 'tool-room' expands with the growth of specialized machinery, and remains the preserve of the fully skilled man when his monopoly of machine operation has been lost. This growth of the 'tool-room' is an important factor in the development of modern engineering practice.

Meanwhile, on a smaller scale, a reversal of the process of specialization is setting in at certain points. The more automatic types of machinery are, for the most part, designed only for the execution of a particular process or narrow group of processes. The old 'centre lathe', the machine capable of being used for by far the widest range of operations, and indeed the parent of most of the more specialized types, is also the simplest of all in its structure. All the skill is in the man who operates it, and none in the machine itself. The machine tool makers now, with their experience of specialized machinery behind them, set themselves to construct machines capable of doing as nearly as possible the whole range of work capable of being done upon the centre lathe, without making the same demand upon the skill of the operator. The result was the development of the modern types of 'universal'

turret and capstan lathes, expensive machines with a huge equipment of standardized tools, capable of being operated either by a skilled man or by one of the higher grades of semi-skilled workers. On certain classes of operations but not on others, these machines showed themselves capable, with good operation, of a higher output than either the centre lathe or more specialized types of machine.

These various phases of development, while they have been described in the order in which, broadly speaking, they arose, proceeded to a large extent simultaneously, and were all in operation, in varying degrees, in 1914. The process of dilution affected all of them. Its first stage, under the Shells and Fuses Agreement of March 1915, was marked by the introduction of large numbers of special single-purpose and largely automatic machines, or the adaptation of existing machines by the provision of special jigs and adjustments, for the execution of repetitive operations on the production of shells, fuses, and cartridge cases. On these machines women, and to a less extent young persons, were employed.

The second phase, under the Treasury Agreement of March 1915, combined this first stage with a process of substitution of semi-skilled for fully skilled workers on certain types of operations, especially on work previously done by skilled machinists and on turret and capstan lathes. This was for the most part direct substitution, not accompanied by alterations of machinery or process, but involving a concentration of the skilled men on work requiring a high degree of skill.

The third phase, under the Dilution Scheme of October 1915, involved an increasing introduction of women and unskilled men on the semi-skilled types of machine operation, and on the less skilled part of the work previously done by skilled men, which was now largely sub-divided and re-arranged. At this stage, dilutees, who had been first introduced at an earlier stage of dilution, frequently received a further step upwards, and were 'up-graded' to more responsible types of work. During this phase of development the introduction and 'up-grading' of less skilled male workers was proceeding at least as rapidly as that of women.

The fourth phase, subsequent to the general Substitution

Scheme of September 1916, was greatly influenced by the working of compulsory military service. The stream of less skilled male labour flowing into the industry of its own accord had been checked, and the outflow of less skilled workers called up for the army was seriously beginning. The less skilled male recruits henceforth consisted of wounded or sick soldiers returned to the workshops, or of men called up but found unfit for military service. Consequently, more and more use had to be made of women's labour, which began to invade more highly skilled types of work, and especially certain skilled trades, such as oxy-acetylene welding, scientific instrument making, and some of the lighter and defter tool-room processes.

The fifth and last phase, which can also be represented as only an intensification of the fourth, came when, from the middle of 1917 onwards, inroads for military service began to be made even on the fully skilled men. This phase was marked, both by a further advance of women up the industrial scale, and by a renewed 'up-grading' even of the less suitable types of less skilled labour which had been left in the workshops because of its unfitness for military service. The continuance of the War beyond 1918 would almost certainly have meant at least a temporary decline in the quality of production because of the real shortage of adequately skilled workers. This might have been overcome with further experience, but only by a far more complete recognition of women's labour than was ever accomplished, and far fuller provisions for the special training of women than were ever made.¹

In a subsequent chapter I shall indicate the important effect which compulsory military service exercised on the ultimate working of dilution; but it is possible in advance to indicate, provisionally and subject to the fuller discussion which is to follow, the forms and stages of this influence. Up to the time when military demands resulted in a severe restriction in the supply of less skilled workers, dilution was assuming mainly the

¹ What could be done by such special training was shown in the special case of oxy-acetylene welding, in which the small but energetic Society of Women Welders, devoting great attention to the training of its members, successfully established its war-time position as a skilled craft.

double form of (a) introduction of women on special or specially adapted single-purpose machines for purely repetitive work; and (b) substitution of less skilled for skilled men on many types of machines normally used in general engineering work before the War. If this course of development had continued, and the War had lasted, for a considerable time—say, at least until 1917—it is easy to see that the main results of dilution would have been a great increase in the numbers of skilled (but not fully skilled) and semi-skilled machinists, and, in the material aspect, a great increase in the numbers of turret and capstan lathes, universal and other milling machines, and other special-purpose, but not automatic machinery. Women would probably have made headway in certain special branches of engineering and kindred work, and would have been retained, to a greater extent than before the War, on the lighter types of automatic and semi-automatic machinery; but the really vital change would have been the disintegration of the skilled crafts by the rise of the semi-skilled machinists.

This did not occur because, when conscription began to operate and increasingly as it claimed the less skilled types of male munition workers for the army, the supply of male labour dried up, and increased use had to be made of women. This usually involved, or was supposed to involve, considerable changes in the methods of production, the introduction of special types of machine, or of specially equipped machines, and a division of the job between the skilled men, who did the setting-up and the supervision, and the women who actually operated the machines. Dilution in this form was far less readily adaptable to post-war forms of production than the previous form, in which semi-skilled men were substituted for skilled men without substantial change of process.

Moreover, even when the numbers of the less skilled men were again increased by the supply of army reserve munition workers (sick, partially disabled, or physically unfit men), these workers, while shift had to be made with them under stress of war conditions, were hardly likely to be of a type which the employers would desire to retain when the War was over. Thus, the actual pushing further of the process of dilution after 1916, while it

seemed at the time so seriously to menace the position of the skilled men, was in fact making easier the return to pre-war conditions.

It is no part of my purpose in this study of the war period to forecast the course of future engineering development. It should, however, be observed that the war experience has considerably strengthened the opinion among employers, already articulate to some extent before the War, that the old sharp division of 'skilled' and 'unskilled' workers into two distinct, and together all-embracing, classes is wholly inadequate in face of modern engineering conditions. Early in the War, both parties were, indeed, compelled to adopt a triple classification of workers into 'skilled', 'semi-skilled', and 'unskilled', and even to resort on occasion to the phrase 'fully skilled' as distinguished from 'skilled'. But this rough-and-ready re-classification is hardly more adequate than the old; and employers are increasingly inclined to put forward the demand for what they call a 'grading of labour', that is, some more precise re-classification which will recognize the existence of a number of groups each possessing a different degree of skill or adaptability. The object of such a classification would be, of course, a corresponding 'grading of wages', under which the highest standard rates would be payable only to a selected class of workers possessing in a high degree both skill and adaptability to varying jobs.

To such a 're-grading' the Trade Unions have usually been opposed; but they, on their side, have been increasingly disposed to put forward the demand for the universal extension of apprenticeship, in some form, to all grades of machinists (except perhaps 'automatic' operators). Both the Trade Unions and the employers separately discussed this question, and prepared reports upon it for their own guidance during the War. Preliminary discussions on the 'machine question', as it is usually called, took place between them in 1919; but no serious attempt has yet been made to deal with the problem, which remains the most vexed of the many vexed questions dividing employers and Trade Unionists in the engineering and kindred industries.

The whole problem has, of course, a close connexion with the future of the engineering industry as a whole; for, in the long

run, the recognized grading of labour is bound to correspond to the actual conditions of production. A general adoption of the methods of 'mass production' and 'scientific management', which operate at present only to a small extent in British engineering, would necessarily involve re-classification of workers, and would bring many of the methods tried under dilution during the War back into operation. If, on the other hand, British engineering continues along its pre-war course of more gradual development, concentrating largely on those types of work which lend themselves least to 'mass production' methods, it may be long before the lack of correspondence between the present classification of labour and the actual forms of production becomes so great as to compel a drastic readjustment.

CHAPTER IV

TRADE UNIONISM IN THE MUNITIONS INDUSTRIES BEFORE THE WAR

It will be seen that Trade Union organization in the engineering and kindred industries was based, before the War, on the distinction between the skilled and less skilled workers. It is true that this distinction was not absolute, for the leading engineering Union, the Amalgamated Society of Engineers, included a considerable number of workers who were not fully skilled. Its section 'E', composed of machinists, had 10,708 members in July 1914; and it included also a small number of unskilled workers organized in its much disputed Class F, which had 1,254 members at the same date. Broadly speaking, however, the A.S.E. was taken as representing, and regarded itself as representing, primarily skilled workers in the engineering industries, while the smaller Societies which competed with it for members were in several cases confined entirely to skilled workers. Two of these small Societies connected with general engineering—the Amalgamated Society of General Toolmakers, and the United Machine Workers' Association—which had respectively 15,360 and 11,259 members in 1914, organized fully skilled workers, together with the higher grades of machinists whom the fully skilled mechanic was inclined to regard as only 'semi-skilled'. The general labour Unions had a membership in the engineering and kindred industries engaged mainly either as labourers on unskilled work or as machinists on the less skilled types of machine-minding; but the work actually done by their members overlapped to a considerable extent, in the semi-skilled branches, the work of the less fully skilled members of the A.S.E., and of other Unions belonging to the skilled group.

Theoretically, the test of skill was still, before the War, and is still to-day, mainly that of apprenticeship. The term 'apprenticeship', however, in the British engineering industries does not bear any definite or precise signification. The ordinary engineer

apprentice does not work under written 'Articles of Apprenticeship', and it is not always easy to decide whether a particular worker has actually been apprenticed or not. Thus, the qualifying rules of the A.S.E. for membership in the various grades which it recognized in 1914 were as follows :

Governing Rule (Rule 1, Section 22).

The Society shall consist of members belonging to, and earning the rate of wages fixed by the District Committees, for the following trades or branches : Smiths, ship smiths, angle iron smiths, ships' plumbers, fitters or turners or either of these or others here mentioned as seagoing engineers, roll turners, patternmakers, machinists, millwrights, mechanical draughtsmen, planers, borers, slotters, machine drillers, milling machine workers, shapers, and other machine men ; brass finishers and copper smiths employed in the engineering and shipbuilding trades ; armature winders and electrical engineers generally, mechanical and scientific instrument makers, machine joiners employed in the construction of cotton, silk, flax, woollen, or other machinery ; die sinkers, press tool makers and stampers, or drop hammer forgers employed in the engineering and kindred trades, and all other workers engaged in the metal industry and trades constituting societies who may hereafter agree to amalgamation.

Classes A, B, and C. Full members (Rule 20, Section 5).

Each candidate for admission under this rule must be qualified for membership under the following conditions : He shall have served five years at one or more of the trades mentioned in these rules, except in countries where a less number of years' apprenticeship is the established rule ; or he shall have served three years in the workshop in addition to at least four years previously in the engineering department of a technical school ; or he shall have been a full member of another Society, and having paid up all arrears in that Society joins the A.S.E. within six weeks afterwards. . . . He must be of good ability as a workman, of steady habits and of good moral character.

Class D. Apprentices (Rule 21, Section 1).

Any apprentice who is working at any of the trades mentioned in Rule 1, and who is not less than 16 or more than 20 years of age, may be admitted as a probationary member provided he is of good moral character, good health, and of average promise as a workman.

Class E. Trade Protection Members and Machine Workers (Rule 22, Section 1).

Persons over the age of 21 years following any of the branches of trade

mentioned in Rule 1, clause 2, may be admitted members of this section provided they have worked at least five years at any of the branches of trade mentioned in Rule 1, clause 2, and are not eligible to join as full members under Rule 20, and persons who have been machine workers for two years, but must be working under conditions sanctioned by the District Committee.

Class F. Helpers and Assistants (Rule 23, Section 1).

Any worker engaged in the metal industry who is not eligible to join any of the foregoing classes may be admitted members of this section and shall be under the control of the District Committee.

It is clear from these rules that, in practice, side by side with apprenticeship, a form of qualification based on a given number of years' work at a trade was recognized as a possible means of arriving at the status of a skilled tradesman. In fact, however, the great mass of fully skilled workers—fitters, turners, smiths, moulders, &c.—passed through a recognized period of apprenticeship, although this was usually done without definite 'articles' being signed. On the other hand, there was no such recognized period of apprenticeship in most of the semi-skilled, and none at all in the less skilled branches of engineering and kindred work, and in these grades the employer was usually free to employ any person he chose upon any process, without regard to any special trade test or qualification.

This somewhat ill-defined position, which was a frequent cause of disputes for many years before the War, arose and arises still from the fact that the methods of production in the engineering industry are not static, but constantly changing, as all students of engineering practice have long recognized. Before the War, the general result of the changes which were taking place was to increase the proportion of semi-skilled and less skilled to fully skilled workers, while at the same time probably also reducing the proportion of men whose work could be regarded as completely unskilled.

I cannot do better than describe this rise of the semi-skilled in the engineering industry in the words actually used by a 'left-wing' engineer Trade Unionist, in dealing with the need for Trade Union amalgamation on industrial unionist lines, in a pamphlet written before the War :

‘Modern developments in the engineering industry’, says Mr. W. F. Watson in this pamphlet,¹ ‘render it necessary that the whole basis and fabric of our organisation shall be changed . . . the monster machine which is developing with ever-increasing rapidity (thus augmenting the productivity of the worker) and the application of scientific research to materials are forces which compel the engineer to concern himself as to what the future has in store for him. . . . Just as the development of the industry tends to eliminate craft distinction, so must we eliminate craft distinction from our organisation.’

Mr. Watson went on to point out that the really important developments in the engineering industry were (1) the revolution in the methods of casting which enabled a large part of the work of the machinist to be dispensed with, by carrying out, in the course of the casting processes, work which could hitherto only be done upon the machine; and (2) the introduction of large numbers of new types of machines, both adaptations of the old ‘centre lathe’, requiring for their operation a less degree of skill, and new types of almost completely or partly automatic machinery. The skilled labour in certain crafts, as Mr. Watson points out, became ‘incorporated’ in the new machines. The lines of craft demarcation became blurred and meaningless, and, in place of the old clear-cut distinctions between skilled and unskilled, there arose more and more the class of semi-skilled workers operating more complicated machines, and by their aid displacing the skilled craftsmen.

Mr. Watson, as an ‘Industrial Unionist’ anxious to bring about the organization in one Union of all workers concerned with the metal industries, was naturally inclined to emphasize, to the fullest possible extent, the effect of the changes in engineering production in eliminating craft differences and in replacing fully skilled by semi-skilled workers. Broadly speaking, however, there can be no dispute as to the correctness of his line of argument. He may represent the process as having gone considerably farther than it had gone at the time when he wrote; but he was essentially right concerning its direction and tendency.

The engineering industry of to-day has grown out of very

¹ *One Union for Metal, Engineering, and Shipbuilding Workers*, by W. F. Watson, published by the Metal, Engineering, and Shipbuilding Amalgamation Committee in 1913.

small beginnings ; not by one great change, but by an endless succession of variations—variations such as are still occurring in its methods almost every day. The existing Trade Unions of skilled workers grew up at a time when the engineering industries had expanded enormously in comparison with their position a century ago, but before the creation of automatic and semi-automatic machinery had begun to raise fresh problems. The typical engineer of the first period of engineering, the millwright, the all-round mechanic, capable of performing any job in the general branches of engineering, had already to a great extent given place to the more specialized fully skilled craftsman, confining himself to one or at most two trades—the fitter, the turner, and the rest ; but the large class of less skilled labour intermediate between the fitter or the turner and his labourers or ‘ helpers ’ had not yet arisen. Engineering Trade Unionism thus took on a definite shape while the metal industries were in their second stage of development, and it has retained this shape with only comparatively small modifications long after engineering itself has passed into its third stage. At this stage the fully skilled craftsman is by no means completely done away with ; but his labour is supplemented by that of the ever-increasing army of less skilled workers, to whom he may often stand in the relation of a ‘ setter-up ’ or even of an instructor. The number of fully skilled men has not diminished, but increased ; but the proportion which they bear to the total numbers employed in the engineering and kindred industries has decreased, and had been decreasing rapidly in the years preceding the War. Out of this fact, and the imperfect recognition of it in the structure of engineering Trade Unionism, arose many of the bickerings and differences upon which Mr. Watson dwelt in his arguments for the amalgamation of all the engineering Societies, and the inclusion in their ranks of the whole of the less skilled workers in these industries.

While these changes were coming about in the metal industries the skilled workers were constantly engaged in the struggle to maintain their position in face of what they regarded as the ‘ menace ’ of less skilled labour. This was one of the points at issue in the great engineering dispute of 1896 and 1897 ; and the

agreements concluded in 1897 conceded, in so many words, the right of the employers to employ any workman they chose upon any process. In other words, according to the letter of the agreement, the Trade Unions representing the skilled workers waived their right to insist on apprenticeship as a qualification for employment in any branch of the engineering industry, or to impose any restrictions on the extension of the less skilled types of labour.

A comparison of the clauses in the agreement of 1897 and in subsequent agreements dealing with this point will serve to show that, in theory, this position was largely maintained even up to the outbreak of war, or rather up to the moment when the engineers, early in 1914, gave notice to terminate the agreement of 1907, under which they had actually been working up to that time. But, while in theory the restrictions imposed by the Trade Unions on the classes of labour to be employed could not continue to exist under the collective agreements entered into between the principal engineering Trade Unions and the Engineering Employers' Federation, in practice these restrictions still continued to be operative in proportion to the industrial strength of the Trade Unions concerned in maintaining them. The employer was not free to employ what classes of labour he chose on any particular operation. Large numbers of operations and machines were still, except in non-Union establishments, in fact confined to workers whom the Trade Unions recognized as fully skilled, and the unwritten regulations enforced by the skilled workers were on the whole enforced no less rigidly in shops where the engineering Trade Unions had a firm hold than if they had been actually incorporated in collective agreements with the employers. That this was so is clearly revealed by the fact that these rules and regulations, although most of them did not exist in writing, required, for their enforced suspension during the war period, not only an Act of Parliament, but also a very great deal of national, local, and workshop negotiation, and involved a considerable amount of conflict between the craft Unions on the one side and the employers and the Government on the other. It is largely the history of this suspension which we shall be following out in the course of succeeding chapters.

As in most other trades possessing a strong Trade Union organization, the Unions in the engineering industry had as their first line of defence against the desire of the employers to buy their labour as cheaply as possible, the laying down by the Unions of certain standard rates of wages, which were either incorporated in collective agreements between the employers and the Trade Unions, as was the more usual practice, or in certain cases were recognized in practice without any written representative agreement. In every area in which a large amount of engineering work was carried on, there was a rate known as the general district rate. This was the rate applicable generally as a minimum standard to all the many classes of skilled workers. Sometimes there were different rates for different branches of the engineering and kindred industries. Thus, in a shipyard centre, the rate for shipyard work usually differed from the rate for general engineering establishments, and was frequently somewhat higher. Ship repairing, again, was often paid for at a higher rate than ship-building proper. Again, in the railway centres there was usually before the War a distinct rate for railway engineering shops; and in many of the textile districts there was also a distinct rate for textile engineering work. Both the railway and the textile rates were, as a rule, somewhat lower than the general engineering rate. These general rates were not the only rates for skilled workers that might be recognized in each engineering district. In many districts the workers belonging to certain particular crafts, such as the patternmakers or the smiths, had rates different from, and usually where they differed, rather higher than the general engineering rate. On the other hand, rates were also frequently fixed for certain classes of machine workers who were recognized as 'skilled' workers, but not as 'fully skilled' in the same sense as the smith, the patternmaker, the fitter, or the turner. Millers, for example, were in some districts in receipt of the full general engineering rate, while in others a distinct rate slightly lower was fixed for them. Rates lower than the general district rate were frequently fixed for such specialized grades of workers as borers, slotters, shapers, and planers.

Below these grades of skilled engineering workers there was the whole range of less skilled labour—from the comparatively

highly skilled machinist to the unskilled labourer. For all these grades there existed as a rule no recognized district rate embodied in a collective agreement, although there did exist in many cases customary rates applied in a particular shop or factory, and sometimes a more or less fully recognized rate applicable over the whole area. Normally, however, there was a considerable margin of variation in the payment accorded to the less skilled types of workers, and employers were free to promote at will within the range of less skilled engineering work, and to graduate pay in accordance with their estimation of what the work was worth, subject, of course, to Trade Union action, where the rates afforded were considered to be inadequate.

The general district rates and the other recognized rates applicable in each district have been variously described as 'standard rates' and as 'minimum rates'. They were certainly not 'maximum rates' in the sense that no employer could or did offer more than the agreed rate laid down for the particular type of work in question. Workers in the tool-rooms, for example, frequently received more than the general rate for fitters, and some shops paid almost uniformly to all grades of workers employed special rates higher than the district rates for the area. Nevertheless, the rates laid down, while they were not *maxima*, were much more standard rates than *minima*, and the great majority of the workers employed, where they belonged to an occupation for which there was a recognized rate, did receive this rate, and neither more nor less.

It must be noted that the basis on which wage rates were fixed in the engineering and kindred industries was purely local. As a rule, rates were fixed separately for each town or for a small group of towns forming a more or less homogeneous unit. In a few cases the area covered was comparatively wide. Thus, the Clyde area was treated as a single unit, and a tendency to extend the area over which Clyde rates were recognized had been manifest for some time before the War. The Manchester rates extended to a number of neighbouring towns such as Warrington, Newton-le-Willows, Ashton-under-Lyne, and Stockport. The north-east coast had a system under which practically uniform rates were recognized, not only for the whole Tyne area, but also for the

Wear and Tees ; and the London rate covered a considerable area in the neighbourhood of the Metropolis.

Variations in wages were, before the War, initiated locally, and were the subject, in the first instance, of local negotiations. Under the 'Provisions for Avoiding Disputes',¹ which were in force between the Engineering Employers' Federation and the principal engineering Trade Unions, reference was made to a national conference between these bodies where no settlement could be arrived at by direct negotiation locally. But, while there was a provision for national adjustment of local disputes, the wage settlements themselves remained purely local in character. There was thus room for wide variations in the rates paid to the same grades of workers in different parts of the country ; and this meant not only that the general level of wages was higher in some parts than in others, but also that the margin of variation between the wages paid to different trades was greater in some than in other districts. The following table, which is based purely on the selection of a few districts which serve clearly to illustrate these differences, will suffice to show that the margin might be in some instances comparatively wide.

PRE-WAR STANDARD RATES OF WAGES

A.S.E. Rates for Fitters—July 1914

(Select Districts)

All rates are given to the nearest shilling

- 41s. Belfast.
- 40s. London, Southampton, Cardiff, Swansea.
- 39s. Manchester, Liverpool, Barrow-in-Furness, Preston, Bury.
- 38s. Birmingham, Coventry, Bristol, Hull, Nottingham, Oldham, Rochdale, Bolton, Chatham, Glasgow.
- 37s. Tyne, Leeds, Leicester, Accrington, Blackburn, Bradford, Dundee.
- 36s. Derby, Doncaster, Halifax, Luton, Peterborough, Wolverhampton, Aberdeen, Cork.
- 35s. Bedford, Brighton, Chester, Crewe, Dewsbury, Huddersfield.
- 33s. Colchester.
- 32s. Keighley, Otley.
- 30s. Lincoln.

Note.—These are the general district rates for fitters. In some areas there were also special rates, sometimes higher and sometimes lower, for

¹ Embodied in the 'York Memorandum' of April 1914. See Appendix A.

particular classes of establishments. Rates for railway work were usually below, and for marine work above, the general district rates. In Lancashire towns there was usually a special rate for textile work, either 1s. or 2s. a week below the general district rate.

Collective negotiations between the Trade Union District Committees and National Executives, most of which were linked up in the Engineering and Shipbuilding Trades Federation, on the one hand, and the local associations of engineering employers and the National Engineering Employers' Federation on the other, covered, of course, a much wider range of questions than that of wages alone. Such matters as the number of hours to be worked; the methods of remuneration; the amount of payment for, and the conditions regulating, overtime, night shifts, and holidays; the determination of special outworking and similar allowances; the number and length of breaks in the working day; and many other matters were the subject of local agreements which were arrived at by the same methods of negotiation as the standard rates of wages to be paid. Thus practically all matters subject to collective bargaining were determined locally, with only a provision for national appeal in case of local 'failure to agree'. The only matters which were regulated on a national basis for the whole industry were those included in the national agreement of 1907, or in the 'Provisions for Avoiding Disputes', which are quoted in full in Appendix A, and of these the former had been terminated by notice from the A.S.E. as from April 1914. There were, in addition, a few special national agreements regulating conditions in particular types of work, such as the agreement between the Trade Unions and the Federated Admiralty Contractors. These, however, were exceptions; and local negotiations and agreements were the rule throughout the greater part of the engineering and kindred industries.

It has been mentioned above that the majority of the Trade Unions which were largely concerned were associated for certain purposes in the Engineering and Shipbuilding Trades Federation.¹ In addition to the Unions of skilled workers, some, but not all, of the general labour Unions were in this Federation. It was not, however, a negotiating body; and, although it served to some

¹ The A.S.E. was connected with this body before the War, but left it in 1917.

extent as a means of co-ordinating the policy of the various Unions, its authority was, on the whole, weak. The skilled Unions generally met the employers in a general conference, from which nationally, and often locally also, the general labour Unions were excluded. These met the employers as a rule separately, and followed for the most part the lead of the skilled workers. They were, at this time, weakly organized except in the shipyards, and had not yet escaped from a position of dependence on the skilled craftsmen's organizations.

Throughout this chapter and the last, while the differences between skilled and unskilled workers have been frequently referred to, hardly anything has been said of the pre-war position of women in the engineering and kindred industries. This is because the problem of women had assumed at that time only very small proportions in relation to the whole engineering group of occupations. All the Unions concerned principally with the organization of skilled workers were Unions of men only, and would have admitted no women even if they had been working under conditions which otherwise would have rendered them eligible for membership. The idea of sex exclusiveness was not, however, prominent; for such complications, in most branches of engineering, very seldom arose before the great influx of women into the industry during the War. The general labour Unions, on the other hand, were open equally to men and women; and some of the women employed in the metal trades were organized together with the men in these bodies. The National Federation of Women Workers, which was, in effect, a general labour Union on a 'sex' basis, had also a considerable membership principally engaged in certain of the minor metal trades in the 'Black Country'. In general, however, the women employed in metal trades were not very numerous, were very weakly organized, and were in receipt of exceedingly low rates of wages. The total number of women employed in the whole of the metal industries in July 1914 was 170,000, as against 1,634,000 men, and the great majority of these were in the minor metal trades, and did not come into direct competition with male engineering labour.

CHAPTER V

FROM THE OUTBREAK OF WAR TO THE MUNITIONS ACT

THE immediate effect of the outbreak of war, even in those industries in which the shortage of workers subsequently became most acute, was to create serious unemployment. During the first few months of the war period the activities of the Trade Unions were largely concentrated on the question of securing relief for the unemployed. The first act of the representative Labour bodies was the formation of the ' War Emergency Workers' National Committee ', which was appointed at a conference held on the 6th August, 1914. This body was active in seeking to secure relief or maintenance for the unemployed ; and its efforts were seconded by the Central Committee for Women's Employment, which was appointed on the 20th August, and obtained help from the National Relief Fund, in aid of which many Trade Unions imposed levies on their employed members. There was, at this stage, no hint that the main problem of the war period would be, not unemployment, but the shortage of workers. In the case of women, whose labour was largely used subsequently to meet the shortage, the net contraction in the numbers employed in industry amounted to 190,000 in September. As the position changed, the contraction fell to 139,000 in October, 75,000 in December, and only 35,000 in February, 1915, after which the period of expansion began.

The second act of the Labour bodies on the outbreak of war was to declare an ' industrial truce '. This was solemnly done by the Trades Union Congress, the Labour Party, and the General Federation of Trade Unions, through their Joint Board, on the 24th August, 1914 by the adoption of the following resolution :

' That an immediate effort be made to terminate all existing trade disputes, whether strikes or lock-outs, and whenever new points of difficulty arise during the war period a serious attempt should be made by all concerned to reach an amicable settlement before resorting to a strike or lock-out.'

Even before the 24th August, most of the disputes which were in existence at the outbreak of war had been hastily settled by agreement. During the following month most of the Trade Unions which had been proposing to bring forward national claims in the autumn of 1914 cancelled their programme, and accepted the 'truce' as involving the postponement of their claims. Unemployment, and the maintenance of the unemployed, were the only industrial questions on which Trade Union demands were being brought forward at this stage.

But soon, even while widespread unemployment continued to exist, the first signs became manifest of an impending change so far as the industries supplying munitions were concerned. In November complaints began to be received by certain of the Trade Unions from their members that firms engaged on munition work were ignoring established workshop practice and Trade Union regulations by employing unskilled labour introduced for the purpose on work which was claimed as the monopoly of skilled craftsmen. There were a number of minor cases of this sort, some of them relating to the employment of Belgian refugees ; but most were settled without serious disagreement. The first really important case arose, and led to threats of serious trouble, at Messrs. Vickers' works at Crayford, where the skilled Trade Unionists organized in the engineers' and toolmakers' Societies objected to 'setting up' work on machines which were to be operated by female labour. This dispute led to a composite conference between the Engineering Employers' Federation and the two Unions affected in London on the 26th November, at the close of which the following agreement, the first of its kind during the War, was signed by representatives of the parties :

CRAYFORD AGREEMENT, November 1914

Memo. of Conference between the Engineering Employers' Federation and the Amalgamated Society of Engineers and Society of Amalgamated Toolmakers, etc., held at 24, Abingdon Street, Westminster, S.W., on 26th November 1914.

Objection to set up machines upon which female labour is employed—Messrs. Vickers Limited, Crayford.

After discussion it was mutually agreed to recommend the following in settlement :

(1) It is not the intention of the firm to give the work of skilled men to female labour.

(2) All machines requiring adjustment of tools by the operator, either before or during the operation, shall be operated by male labour.

(3) Female labour shall be restricted to purely automatic machines used for the production of repetition work.

(4) A purely automatic machine is a machine which, after the job has been fixed, requires no hand adjustment until the operation is finished. All such automatic machines shall be set up by fully skilled mechanics.

(5) Lathes used for turning, screwing, and for boring of shells shall be operated by male labour.

(6) The foregoing shall be observed until the termination of the War, when the whole question shall be discussed, if desired, without the foregoing settlement being argued to the prejudice of either party.

Signed on behalf of—

The Engineering Employers'
Federation :

HENRY LAWTON, Chairman.

ALLAN M. SMITH, Secretary.

The Amalgamated Society of
Engineers :

J. T. BROWNLIE, Chairman.

ROBERT YOUNG, Secretary.

A. B. SWALES, O.D.D.

Amalgamated Society of Tool-
makers, etc. :

GEORGE WILKINSON,

EDWARD CRUSE, London

Organiser.

It was not, however, long possible to deal with the question in this piecemeal fashion. On the 10th December 1914 the Engineering Employers' Federation came forward with a national demand for the abrogation, during the war period, of Trade Union regulations and customs which would prevent the employer from utilizing all grades of workers as he might consider best for the purpose of increasing the production of munitions. The employers began by stating that at least 15,000 additional workmen were needed in order to meet present requirements. They then tabled proposals that 'in consequence of the Unions' inability to supply the requisite amount of labour, they agree to remove certain trade restrictions without prejudice during the continuance of the War'. The full demand was that 'the Unions should agree not to press the following questions to an issue, but to confine themselves to noting any such by way of protest for the purpose of safeguarding their interests :

- (a) manning of machines and of hand operations ;
- (b) the demarcation of work between trades ;
- (c) the employment of non-union labour and of female labour ;
- (d) the question of the limitation of overtime.'

These demands, it will be seen, covered virtually the whole field of the Trade Union regulations governing the relations of skilled and less skilled workers. If the Trade Unions had accepted the employers' proposals, they would have been committed, without safeguards, to allowing any and every form of dilution to take place. Clearly, any such abrogation of Trade Union conditions, if it was to be carried through at all either in whole or in part, would have to be a matter of detailed negotiation and would involve the concession of the fullest possible safeguards against the abuse of such relaxations as might be necessary under the special circumstances of war. The whole history of the subsequent negotiation and bargaining over dilution largely centred round these very questions, and resulted in an elaborate code of regulations governing the conditions under which dilution might be introduced and extended.

On the 10th December 1914 the Joint Conference was adjourned in order to enable the Trade Unions to consider fully the employers' proposals. When it met again, a week later, on the 17th December, the Unions brought forward counter-proposals designed to meet the shortage of workers without a complete supersession of Trade Union customs. These counter-proposals were in the following terms :

(a) Firms not engaged in the manufacture of war goods to be given such work.

(b) Firms that are at present working 'short time' to transfer their workmen to firms engaged on Government work.

(c) Joint representations to be made to the Government to pay subsistence allowance money to men working in places a distance from their homes.

(d) That the Government draft skilled engineers from Australia, Canada, and South Africa.

(e) In view of the fact that 10,000 skilled engineers have recently enlisted, thus reducing the supply of skilled labour, the Government should withdraw from military duties all those available for industrial purposes.

It should be noted that, of these proposals, (a) was steadily acted upon by the Government from March 1915 onwards, when the big extension of the list of War Office contractors really began; (c) was incorporated in the 'War Munitions Volunteers' scheme, brought into force a few months later. Action was also taken on both (d) and (e), while (b) was carried into effect partly by the voluntary act of men changing their employers, and partly under the 'W.M.V.' scheme.

The employers, however, held that the Trade Union proposals failed altogether to meet the case in favour of the suspension of Trade Union regulations, and the conference dispersed without reaching a decision. The following correspondence then passed between the Trade Unions and the Engineering Employers' Federation :

The employers have given very careful consideration to the proposals now submitted by the Unions.

These proposals do not provide any adequate remedy for the present difficulty of obtaining the necessary supply of workpeople.

The requirements of the nation are pressing and must be met, and the employers much regret to see that the Unions now represented (namely, A.S.E., S.E.M., U.M.W.A., Amalgamated Toolmakers and Scientific Instrument Makers) appear to regard the strict adherence to their rules, regulations, and restrictions as of greater importance than the supply to the nation of its requirements in this crisis.

The employers further desire to place on record their disappointment that their proposals to assist the country should have met with no response.

HENRY LAWTON, Chairman.

ALLAN M. SMITH, Secretary.

The Engineering Employers' Federation, 17th December 1914.

The Unions replied :

The Unions having considered the statement issued to them by the Engineering Employers' Federation, in reply to the proposals submitted by the Unions' representatives, record their entire disagreement from the statements contained therein.

The Engineering Employers' Federation are not entitled to assert that the Unions regard an adherence to their rules and regulations as being of more importance to them than the interests of the nation; but we do consider that until the Engineering Employers' Federation have discussed with the Unions' representatives the proposals submitted for the migration of workmen with a subsistence allowance, and other suggestions to

meet the urgent requirements of the nation, our trade rights are of no less importance than are the interests of the Engineering Employers' Federation.

The Unions do not accept the position that their action can be regarded as a failure on their part to help the country during the stress of national emergency, and, further, the Unions are prepared to give every assistance in their power, having due regard to the trade rights upon which Trade Unionism is founded.

The Unions are prepared to continue their deliberations in conference with the Engineering Employers' Federation.

Signed on behalf of the—

Amalgamated Society of Engineers :

J. T. BROWNLIE, Chairman.

ROBERT YOUNG, Secretary.

Steam Engine Makers' Society :

W. F. DAWTRY, Secretary.

Amalgamated Toolmakers' Society :

W. F. BESTON, Secretary.

United Machine Workers' Association :

ROBERT H. COATES, Secretary.

Scientific Instrument Makers :

J. W. CLARK, Secretary.

17th December 1914.

The Federation replied :

The employers have received the further statement of the Unions, and note they suggest a resumption of the conference.

Provided the Unions agree to remove the restrictions referred to in the employers' original proposals, the employers are prepared to resume the conference for the purpose of adjusting safeguards so as to secure the position of the Unions on the termination of the War.

HENRY LAWTON, Chairman.

ALLAN M. SMITH, Secretary.

The Engineering Employers' Federation.

17th December 1914.

The Unions replied :

The representatives of the Unions have considered the further statement of the Engineering Employers' Federation, which assumes the concession of their full demands, and therefore provides no basis for discussion.

The Unions are unable to agree to a resumption of the conference on the lines suggested.

The Unions again state their willingness to meet the Engineering Employers' Federation in open conference for a discussion of the whole matter.

Signed on behalf of the—

Amalgamated Society of Engineers :

J. T. BROWNLIE, Chairman.

ROBERT YOUNG, Secretary.

Steam Engine Makers' Society :

W. F. DAWTRY, Secretary.

Amalgamated Toolmakers' Society :

W. F. BESTON, Secretary.

United Machine Workers' Association :

ROBERT H. COATES, Secretary.

Scientific Instrument Makers :

J. W. CLARK, Secretary.

The matter did not rest here. Towards the end of December, Sir H. Llewellyn Smith, Permanent Secretary of the Board of Trade, met the Unions, and further pressed the demand for a relaxation of Trade Union conditions. On the 2nd January 1915 both the Admiralty and the War Office addressed to the Trade Unions and to the Employers' Federation letters in practically identical terms calling for arrangements to meet the shortage of workers. The letter from the War Office ran as follows :

War Office,

2nd January 1915.

DEAR SIR,—I am desired by the Secretary of State for War to inform you that, while he fully appreciates the efforts of both employers and workmen to maintain adequate supplies for the Army in the field, the present requirements are such as render it necessary that further and greater efforts should be made.

The Secretary of State is aware of the difficulty due to a shortage of various classes of the workpeople required, but he is of opinion that temporary arrangements could be made to overcome this shortage and that a greater output than at present could be attained.

Lord Kitchener believes that the call of the present national emergency is fully appreciated by the representatives of both employers and workmen, and that they will make arrangements to meet the requirements of the crisis and to secure the safety of the nation. He does not desire even to suggest what steps should be taken, but he does express the hope that these important matters may have your immediate attention.

A letter in similar terms has been sent to the Chairman, the Engineering Employers' Federation.

Yours sincerely,
HAROLD BAKER.

The General Secretary, The Amalgamated Society of Engineers.

On the 13th January, at the request of the employers, a further conference was held at Sheffield. The Engineering Employers' Federation there put forward the following proposals :

Supply of Workpeople

The Admiralty and War Office having requested the Federation and the Unions to take steps to secure an increased output,

It is mutually agreed :

1. The following arrangements shall have effect during the War, and shall in no way prejudice any of the parties on any of the points covered, and the parties shall, at the termination of the War, as the Federation and the Unions now undertake, revert to the conditions which existed in the respective shops on the outbreak of hostilities.

2. The Unions agree :

That they shall not press the following questions to an issue, but shall confine themselves to noting any such by way of protest for the purpose of safeguarding their interests :

- (a) Manning of machines, including lathes and the number to be worked by one operator.
- (b) Manning of hand operations.
- (c) Demarcation of work between trades.
- (d) Employment of non-Union labour.
- (e) Employment of female labour.
- (f) Limitation of overtime.

3. The employers agree :

- (a) The provisions of paragraph 2 hereof shall be subject to the continued inability of the Unions to supply suitable workpeople of the classes desired by the employers at district rates.
- (b) That with regard to demarcation of work the employers shall, as far as they can, having regard to the urgency of the work and the trades available, observe the demarcation fixed by local agreement or in practice observed.
- (c) That workpeople shall receive the rates of wages and work under the conditions recognized in the shop in question for the trade at which they are for the time engaged.
- (d) That this agreement shall not warrant an employer making such arrangement in the shops as will effect a permanent restriction of employment of any trade in favour of semi-skilled men.

4. The Unions further agree :

To recommend Unions not here represented that they should also adopt the foregoing attitude with regard to demarcation questions.

To these proposals the Trade Unions replied in the following terms, and drew the rejoinder quoted below from the Employers' Federation :

Supply of Workpeople

The Unions represented have given careful consideration to the proposals made by the Engineering Employers' Federation. The Unions regard these proposals as calculated to hinder production by introducing factors inevitably leading to friction in the workshops of the country, and as unlikely to meet the situation as stated by the employers. The Unions are, therefore, unable to agree to the abrogation of their established trade rights embodied in these proposals, and again direct the attention of the Engineering Employers' Federation to the proposals and suggestions made by the Unions.

18th January 1915.

Employers' reply :

Supply of Workpeople

The employers have received the reply of the Unions. The employers desire to remind the Unions that all that has been asked of them is a relaxation of industrial restrictions during the period of the War, the employers having offered and being prepared to give all the safeguards mutually considered necessary to ensure the resumption at the end of the War of the working conditions which existed in the respective shops at the outbreak of hostilities.

The employers have stated that they do not desire that anything should be done which would permanently affect the status and rights of the Unions, but they have, after carefully considering the position, arrived at the conclusion that the only way to enable them to fulfil the requirements of the nation is to have the restrictions referred to relaxed.

The employers regret that the Unions have not seen fit to respond. As pointed out at the conference on 17th December 1914, the proposals and suggestions of the Unions did not in any way afford the remedy required.

HENRY LAWTON, Chairman.

ALLAN M. SMITH, Secretary.

With these inconclusive proceedings the preliminary negotiations between the Trade Unions and the Engineering Employers' Federation came to an end. At the next stage the Government enters definitely upon the scene as a party to the plans for the reorganization of labour. Already the action taken by the

Board of Trade, the Admiralty, and the War Office had shown that the matter was regarded as one of national concern, and, on the failure of the direct discussions between workers and employers, further action was promptly taken.

On the 4th February the Trade Unions received the following letter from Sir H. Llewellyn Smith, intimating the appointment of a special Committee to deal with the question of shortage of labour in relation to production :

Board of Trade,
7 Whitehall Gardens, London, S.W.
4th February 1915.

SIR,—I am directed by the Board of Trade to inform you that His Majesty's Government have appointed Sir George Askwith, Sir Francis Hopwood, and Sir George Gibb to inquire and report forthwith, after consultation with the representatives of employers and workmen, as to the best steps to be taken to ensure that the productive power of the employees in engineering and shipbuilding establishments working for Government purposes shall be made fully available so as to meet the needs of the nation in the present emergency.

I am to add that the inquiry will be held at 6 Old Palace Yard, Westminster, on Wednesday next, the 10th February, at 10 o'clock, and I am to request that you will be so good as to arrange that representatives of your Trade Union should attend.

I am further to request that you will consider the advisability of delegates from districts chiefly concerned in Government work being in attendance with you.

I am, sir, your obedient servant,
H. LLEWELLYN SMITH.

The General Secretary, Amalgamated Society of Engineers,
110 Peckham Road, S.E.

On the 8th February Mr. Tennant, Under-Secretary at the War Office, made a speech in the House of Commons in which, reporting on the steps taken, he called upon the Trade Unions to abrogate their restrictions for the period of the War. This speech was strongly criticized by the Labour Members of Parliament, who urged that the proper steps had not been taken to make the best use of the labour available.

The new Committee speedily got to work, and came soon to be known as the 'Committee on Production'—a name which it retained, through many changes of function and composition,

throughout the war period. It deserves to be regarded as the most important industrial committee of the war years, and, although its subsequent work was largely confined to wages questions, it played an influential part in hastening the first steps towards the dilution of labour.

The Conference called by the Committee on Production was duly held on the 10th February, and was no less inconclusive than the negotiations recounted above. The Unions drew the Committee's attention to the proposals made by them, which the employers had ignored, and it was promised that these should receive careful attention. The action taken to give effect to them probably dated from this meeting. But, on the major question of the abrogation of Trade Union conditions, no agreement was reached. The Committee on Production therefore decided to report itself to the Government as to the course which, in its opinion, ought to be pursued.

Its First Report, issued on the 17th February, dealt with a comparatively small question—that of 'broken time' on squad work in the shipyards. The formation of a mobile reserve of workers, to take the place of any absentees from the regular shipyard squads, and so prevent interruption of work, was advocated, and action was speedily taken on these lines under agreement by the shipbuilding employers and Trade Unions.

The Second and Third Reports, issued on the 20th February, were of far wider significance, and bear far more directly on the subject of this study. The Second Report, which dealt with 'Avoidance of Stoppages of Work', ran as follows :

AVOIDANCE OF STOPPAGES OF WORK

Whatever may be the rights of the parties at normal times, and whatever may be the methods considered necessary for the maintenance and enforcement of those rights, we think there can be no justification whatever for a resort to strikes or lock-outs under present conditions, when the resulting cessation of work would prevent the production of ships, guns, equipment, stores, or other commodities required by the Government for the purposes of the War.

We therefore submit for the consideration of His Majesty's Government the desirability of the immediate publication of the following recommendation to Government contractors and sub-contractors and to Trade Unions, and to request their adhesion to this recommendation, viz. :

Avoidance of Stoppages of Work for Government Purposes

With a view to preventing loss of production caused by disputes between employers and workpeople, no stoppage of work by strike or lock-out should take place on work for Government purposes. In the event of differences arising which fail to be settled by the parties directly concerned, or by their representatives, or under any existing agreements, the matter shall be referred to an impartial tribunal nominated by His Majesty's Government for immediate investigation and report to the Government with a view to a settlement.

A few days later, on the 24th February, the Committee on Production was empowered to act as a Court of Arbitration in accordance with its own proposal; and, after the issue of the series of Reports with which we are now dealing, its main work lay in this sphere. Its first action under its new powers was to deal with the big strike then in progress among the engineers on the Clyde.

The Third Report is the most important of all from the point of view from which this study is written. It dealt directly with one of the principal questions in dispute between the employers and the Trade Unions.

PRODUCTION OF SHELLS AND FUSES

It has been represented to us very strongly by both the Admiralty and the War Office that there is a present and continuously increasing need for shells and fuses for use by both the naval and military services, and that it is necessary for the existing production to be increased rapidly in order to meet the demand. We need not enlarge upon the vital importance of such a matter and its effects upon the successful prosecution of the War. Under these circumstances there is no reason to doubt that all sections of the community, and not least the workpeople, will desire that everything possible shall be done to maintain and accelerate adequate supplies of ammunition to the fleet and the troops. Restrictive rules or customs calculated to affect the production of munitions of war or to hamper or impede any reasonable steps to achieve a maximum output are under present circumstances seriously hurtful to the welfare of the country, and we think they should be suspended during the period of the War, with proper safeguards and adjustments to protect the interests of the workpeople and their Trade Unions.

Dealing in this part of the present report with the pressing question of shells and fuses, there appear to be two methods whereby the present rate of production of these munitions of war can be increased :

- (1) We are of opinion that the production of shells and fuses would

be considerably accelerated if there were a relaxation of the present practice of the workmen confining their earnings, on the basis of the existing piece rates, to 'time and half', or whatever the local standard may be. We understand this practice is due to some extent to a desire to protect the piece rates; we agree that the present circumstances should not be utilized as a means of lowering rates of wages, and we think the rates in question should be protected. This can be adequately done, however, by other means than restriction of earnings and output. As the only consumers of shells are the Government we recommend that firms engaged in the production of shells and fuses should give an undertaking to this Committee on behalf of the Government to the effect that in fixing piece-work prices the earnings of men during the period of war should not be considered as a factor in the matter, and that no reduction in piece rates will be made unless warranted by a change in the method of manufacture, e. g. by the introduction of a new type of machine. The protection afforded by this guarantee should remove apprehensions on the part of the men that their piece rates might be endangered, and we think, therefore, that the Government would be fully justified in calling upon each man to increase his production to the fullest possible extent, irrespective of his former limits of earnings or shop customs.

Any difference which may arise on this matter which cannot be settled by the parties directly concerned or by their representatives should be referred as suggested in our recommendation respecting 'Avoidance of Stoppage of Work'.

(2) We are satisfied that, in the production of shells and fuses, there are numerous operations of a nature that can be, and are already in some shops, suitably performed by female labour. We therefore recommend that, in order to increase the output, there should be an extension of the practice of employing female labour on this work, under suitable and proper conditions.

If the conditions of employment cannot be mutually arranged by the parties directly concerned, or by their representatives, we think the matter should be referred as suggested in our recommendation respecting 'Avoidance of Stoppage of Work'.

To this Report was subjoined a form of guarantee which, it was proposed, should be signed by all employers who took advantage of the provisions for the relaxation of Trade Union customs. This guarantee was in the following terms :

GUARANTEE TO WORKPEOPLE

In order to safeguard the position of the Trade Unions and of the workpeople concerned, we think that each contracting firm should give an undertaking, to be held on behalf of the Unions, in the following terms :

To His Majesty's Government.

We hereby undertake that any departure during the War from the practice ruling in our workshops and shipyards prior to the War shall only be for the period of the War.

No change in practice made during the War shall be allowed to prejudice the position of the workpeople in our employment or of their Trade Unions in regard to the resumption and maintenance after the War of any rules or customs existing prior to the War.

In any readjustment of staff which may have to be effected after the War, priority of employment will be given to workmen in our employment at the beginning of the War who are serving with the Colours or who are now in our employment.

Date *Name of Firm*

Any difference which may arise under this head which cannot be settled by the parties directly concerned or their representatives should be referred as suggested in our recommendation 'Avoidance of Stoppage of Work'.

On the 4th March the Committee on Production completed its preliminary work with a Fourth Report, divided into two sections, and covering the remainder of the controversial matters raised in the employers' demands.

A.—DEMARCATIION OF WORK

We understand that in the Government establishments the demarcation restrictions are less numerous than in private shipyards and workshops; where they exist in Government establishments we think they should at once be suspended.

In private establishments we are of opinion that on work required for Government purposes or affecting the same the demarcation restrictions which at present exist in regard to the work of the different skilled trades in the engineering and shipbuilding industries should be suspended during the continuance of war. The suspension should be accompanied by the following safeguards:

(1) That the men usually employed on the work required are not available.

(2) That if no suitable labour is available locally, but men can be found from a distance who are unemployed or who can be spared from their existing employment, and the work is of sufficient magnitude to warrant the transfer of men from a distance, opportunity of employment shall be given to such men, providing that the work in hand is not delayed by waiting for them.

(3) That the relaxation of existing demarcation restrictions shall not

affect adversely the rates customarily paid for the job. In cases where the men who ordinarily do the work are adversely affected by relaxation, the necessary re-adjustments should be mutually arranged.

(4) That a record of the nature of the departures from the *status quo* shall be kept.

(5) That any difficulties which cannot be settled between the parties or their representatives shall be referred to the Board of Trade within seven days for speedy settlement. Pending such reference there shall be no stoppage of work.

(6) That the form of guarantee to workpeople which we have suggested in our Second Interim Report, of February 20th, shall be adopted.

B.—UTILIZATION OF SEMI-SKILLED OR UNSKILLED LABOUR

Where an employer is unable to meet the requirements of the Government because of his inability to secure the necessary labour customarily employed on the work, we think it imperative that during the War it should be open to him to make greater use of unskilled or semi-skilled labour, with proper safeguards and adjustments to protect the interests of the workpeople and their Trade Unions. We have suggested, in our Second Interim Report, of February 20th, a form of guarantee which we consider satisfactory for the purpose of safeguarding the position of the Trade Unions and of the workpeople concerned.

If it is claimed by the workpeople or their representatives that the arrangements in any specific case are not necessary or are unduly prejudicial to their interests, the matter should at once be discussed between the firm and the men's representatives. If the question cannot be amicably adjusted, it should be referred in accordance with our recommendation as to 'Avoidance of Stoppage of Work'.

These Reports formed the groundwork of all the subsequent developments of 'dilution of labour' which assumed so great an importance throughout the war period.

Meanwhile, there had been further difficulties arising out of the attempts of employers to introduce dilution in their own establishments before any general agreement had been reached. The firm of Sir W. G. Armstrong, Whitworth & Co. had taken on at their Elswick works, and set to work on jobs which were regarded as confined to skilled engineers, a number of workers drawn from a wide variety of other industries—coppersmiths, lacemakers, cotton operatives, silversmiths, and unskilled workers with or without previous industrial experience. This was resented by the skilled engineers, who, on the 18th February, tendered

notice to cease work. A local conference was at once arranged, and a provisional agreement reached pending the settlement of the whole question on national lines between the Trade Unions and the Engineering Employers' Federation. Temporarily, it was agreed that, whatever class of labour was employed on skilled men's work, the full district rate of wages must be paid. It was also agreed that representatives of the skilled workers should be allowed to inspect both the credentials of the new workers engaged and the work actually done by them. The employers also agreed to furnish the skilled workers with a complete return showing the names of, and other particulars relating to, all less skilled workers engaged.

This, however, was only a provisional settlement, pending a decision of the whole of the points at issue on national lines. Partly as a result of the disputes at Elswick and elsewhere, and partly as a result of the Third Report of the Committee on Production, a Special Conference was held at Sheffield on the 4th March between the Engineering Employers' Federation and the Trade Unions concerned, and at this meeting a definite agreement was reached permitting 'dilution', and laying down the conditions under which it was to operate, on the production of shells and fuses. The following is the text of the agreement arrived at :

SHELLS AND FUSES AGREEMENT

The Government having represented that there is a present and continuously increasing need for shells and fuses for use by both naval and military services, and that it is necessary for the existing production to be increased rapidly in order to meet the demand, and that the numbers of men required for this purpose are not at present available, it is mutually agreed to recommend that the following provisions shall have effect during the War :

(1) Men engaged in the making of tools and gauges shall be skilled men. Men engaged in setting up machines shall be fully qualified for the operations they undertake.

(2) Such men may be drawn from other branches of the engineering industry provided they possess the necessary qualifications, and shall be paid, at least, the standard rate of the district for the operation on which they are for the time engaged.

(3) Lists of men employed in terms of the foregoing provisions shall be furnished to the local representatives of the Unions concerned.

(4) Such men shall first be affected by any necessary discharges either during or after the period of the War.

(5) Where skilled men are at present employed they shall in no case be displaced by less skilled labour unless other skilled employment is found for them in the same department.

(6) Operations on which skilled men are at present employed, but which, by reason of their character, can be performed by semi-skilled or female labour, may be done by such labour during the war period.

Where semi-skilled or female labour is employed in place of skilled labour the rates paid shall be the usual rates of the district obtaining for the operations performed.

(7) The Federation undertakes that the fact of the restrictions being temporarily removed shall not be used to the ultimate prejudice of the workpeople or their Trade Unions.

(8) Any federated employer shall at the conclusion of the War, unless the Government notify that the emergency continues, reinstate the working conditions of his factory on the pre-war basis, and as far as possible afford re-employment to his men who are at present serving with His Majesty's forces.

(9) These proposals shall not warrant any employer making such arrangements in the shops as will effect a permanent restriction of employment of any trade in favour of semi-skilled men or female labour.

(10) The employers agree that they will not, after this war, take advantage of this agreement to decrease wages, premium bonus times, or piece-work prices (unless warranted by alteration in the means or method of manufacture) or break down established conditions, and will adopt such proposals only for the object of increasing output in the present extraordinary circumstances.

(11) The employers agree to take all possible steps to ensure distribution of Government work throughout the Kingdom.

(12) So far as consistent with the national requirements regarding output, the employers undertake to reduce overtime wherever possible, and in any event to distribute it over as large a number of workpeople as practicable.

(13) In the event of semi-skilled or female labour being employed as per the foregoing clauses they shall first be affected by any necessary discharges either before or after the war period.

(14) The liberty of any employer to take advantage of these proposals shall be subject to acquiescence in all the provisions thereof and to intimation of his acquiescence to the local representatives of the Unions through his local association.

This agreement was submitted to a ballot vote of the members of the Amalgamated Society of Engineers, and by them accepted. It thus became the first definite national agreement permitting

the introduction of less skilled workers and the relaxation of Trade Union customs. It will be commented on more fully at a later stage.

Before the ratification of the Shells and Fuses Agreement, steps had already been taken by the Government to carry the process of dilution considerably farther. On the 21st February the Cabinet had appointed a Special Committee, drawn from its own members, to go into the whole question of munitions production; and it was through this Cabinet Committee that the Committee on Production received its extended powers a day or two later.¹ On the 9th March the Defence of the Realm (Consolidation) Act passed into law, including a clause enabling the Government to take possession of factories required for munitions work, and to issue orders to the workers employed in them. Regulations under this Act were issued on the 22nd March. Under them the Government was empowered to 'commandeer the output or plant of any factory or workshop, to direct the work done or the engagement or employment of workmen', and so on.

With these compulsory powers at its back, the Government now approached afresh both the employers and the Trade Unions. During March 1915 a series of private conferences was held between the Government and the employers; but, as no reports of these have ever been issued, it is impossible to say what took place. It is clear that the original idea of the Government was to form a National Joint Advisory Committee of Employers' and Trade Union representatives; but for some reason, which presumably emerged at these unreported conferences, this plan was dropped.

On the 17th March, at the invitation of the Government, representatives of the principal Trade Union bodies concerned in the vital war industries met Mr. Lloyd George and other members of the Government at the Treasury. The Conference, which is known as the 'First Treasury Conference', lasted three days; and on 17th March an agreement, known as 'The Treasury Agreement', was signed on behalf of most of the Societies represented. No full report of the proceedings has ever been issued; but, in general outline, what took place is well known.

¹ See *ante*, p. 63.

The Government's object was to secure the acceptance by the Trade Unions, under a national agreement applicable to all classes of workers, of the proposals made by the Committee on Production in the series of reports quoted above. In the invitation sent to the Trade Unions, the purpose of the Conference was defined as being 'to consider the general position in reference to the urgent need of the country in regard to the large, and a larger, increase in the output of munitions of war, and the steps which the Government propose to take to organize the industries of the country with a view to achieving that end'. The following is a list of the Trade Unions and Federations whose representatives attended the Conference :

ORGANIZATIONS REPRESENTED AT FIRST TREASURY CONFERENCE ¹

A.—*General.*

The Parliamentary Committee of the Trade Union Congress. ²	The General Federation of Trade Unions. ²
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B.—*Engineering.*

Amalgamated Society of Engineers.	Associated Ironmoulders of Scotland.
Steam Engine Makers.	Associated Blacksmiths and Iron- workers.
United Machine Workers.	Electrical Trades Union.
Amalgamated Toolmakers.	Federation of Engineering and Ship- building Trades. ²
United Patternmakers.	
Friendly Society of Ironfounders.	

C.—*Shipbuilding.*

United Boilermakers.	Sheet Iron Workers and Light Platers.
Shipwrights' Association.	Shipbuilding Trades Agreement Com- mittee. ²

D.—*Iron and Steel Trades.*

British Steel Smelters.	Associated Iron and Steel Workers.
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E.—*Other Metal Trades.*

National Amalgamated Sheet Metal Workers.	General Union of Braziers and Sheet Metal Workers. Operative Plumbers.
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¹ The Miners' Federation of Great Britain was represented on the first day, but withdrew, as it was unwilling to accept compulsory arbitration.

² Federations consisting wholly or partly of Unions which were separately represented.

F.—Woodworkers.

Amalgamated Society of Carpenters and Joiners.	Scottish Painters.
General Union of Carpenters and Joiners.	Furnishing Trades Association.
House and Ship Painters and Decorators.	Woodcutting Machinists.
	Amalgamated Cabinet Makers.

G.—Labourers.

Gas and General Workers' Union.	National Amalgamated Union of Workers' Union.
	Labour.

H.—Transport.

National Union of Railwaymen.	National Transport Workers' Federation.
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I.—Woollen.

General Union of Textile Workers.

J.—Boot and Shoe.

Boot and Shoe Operatives.

The Conference opened with a speech from Mr. Lloyd George, in which he pointed out the new powers acquired by the Government to control factories, urged the Trade Unions to accept the proposals of the Committee on Production, and promised safeguards both as to the limitation of employers' profits and as to the restoration after the War of any Trade Union regulations abrogated during the war period which the Unions might subsequently desire to retain. After hearing Mr. Lloyd George, the Conference appointed a Committee of seven members to go into the proposals in detail, and to report back to the full Conference.

The result of the discussions in Committee was the Treasury Agreement, which, on the 19th March, was duly signed on behalf of the bodies represented, except the Miners' Federation, whose delegates had refused to attend after the first day, and the Amalgamated Society of Engineers, which demanded further safeguards. The agreement was signed by Mr. Lloyd George (Chancellor of the Exchequer) and Mr. Walter Runciman (President of the Board of Trade) on behalf of the Government, and by Mr. Arthur Henderson (Ironfounders) and Mr. W. Mosses (Pattern-makers) on behalf of the Trade Unions. It ran as follows :

THE TREASURY AGREEMENT

The workmen's representatives at the conference will recommend to their members the following proposals with a view to accelerating the output of munitions and equipments of war :

(1) During the war period there shall in no case be any stoppage of work upon munitions and equipments of war or other work required for a satisfactory completion of the War.

All differences in wages or conditions of employment arising out of the War shall be dealt with without stoppage in accordance with paragraph 2.

Questions not arising out of the War should not be made the cause of stoppage during the war period.

(2) Subject to any existing agreements or methods not prevailing for the settlement of disputes, differences of a purely individual or local character shall, unless mutually arranged, be the subject of a deputation to the firm representing the workmen concerned, and differences of a general character affecting wages and conditions of employment arising out of the War shall be the subject of conferences between the parties.

In all cases of failure to reach a settlement of disputes by the parties directly concerned, or their representatives, or under existing arrangements, the matter in dispute shall be dealt with under any one of the three alternatives as may be mutually agreed, or in default of agreement, settled by the Board of Trade.

(a) The Committee on Production.

(b) A single arbitrator agreed upon by the parties or appointed by the Board of Trade.

(c) A Court of Arbitration upon which labour is represented equally with the employers.

(3) An Advisory Committee representative of the organized workers engaged in production for Government requirements shall be appointed by the Government for the purpose of facilitating the carrying out of these recommendations and for consultation by the Government or by the workmen concerned.

(4) Provided that the conditions set up in Paragraph 5 are accepted by the Government as applicable to all contracts for the execution of war munitions and equipments, the workmen's representatives at the conference are of opinion that during the war period the relaxation of the present trade practices is imperative, and that each Union be recommended to take into favourable consideration such changes in working conditions or trade customs as may be necessary with a view to accelerating the output of war munitions or equipments.

(5) The recommendations contained in paragraph 4 are conditional on Government requiring all contractors and sub-contractors engaged on munitions and equipments of war or other work required for the satisfactory completion of the War to give an undertaking to the following effect :

Any departure during the War from the practice ruling in our workshops, shipyards, and other industries prior to the War, shall only be for the period of the War.

No change in practice made during the War shall be allowed to prejudice the position of the workpeople in our employment, or of their Trade Unions, in regard to the resumption and maintenance after the War of any rules or customs existing prior to the War.

In any readjustment of staff which may have to be effected after the War, priority of employment will be given to workmen in our employment at the beginning of the War who are serving with the Colours or who are now in our employment.

Where the custom of a shop is changed during the War by the introduction of semi-skilled men to perform work hitherto performed by a class of workmen of higher skill, the rates paid shall be the usual rates of the district for that class of work.

The relaxation of existing demarcation restrictions or admission of semi-skilled or female labour shall not affect adversely the rates customarily paid for the job. In cases where men who ordinarily do the work are adversely affected thereby, the necessary readjustments shall be made so that they can maintain their previous earnings.

A record of the nature of the departure from the conditions prevailing before the date of this undertaking shall be kept and shall be open for inspection by the authorized representative of the Government.

Due notice shall be given to the workmen concerned, wherever practicable, of any changes of working conditions which it is desired to introduce as the result of this arrangement, and opportunity of local consultation with men or their representatives shall be given if desired.

All differences with our workmen engaged on Government work arising out of changes so introduced, or with regard to wages or conditions of employment arising out of the War, shall be settled without stoppage of work in accordance with the procedure laid down in paragraph 2.

It is clearly understood that, except as expressly provided in the fourth paragraph of clause 5, nothing in this undertaking is to prejudice the position of employers or employees after the War.

D. LLOYD GEORGE.

WALTER RUNCIMAN.

ARTHUR HENDERSON

(Chairman of Workmen's Representatives).

W. MOSSES

(Secretary of Workmen's Representatives).

An agreement of this sort was, however, almost useless without the adhesion of the Amalgamated Society of Engineers, which was the Trade Union most vitally concerned in the question of dilution. Accordingly, a week later, on the 25th March, the

Government again met the representatives of the A.S.E., and a long discussion took place. Finally, a series of further guarantees was given by the Government, and in return for these, and for certain verbal promises, the A.S.E. agreed to accept the Treasury Agreement. The text of the additional guarantees, signed on behalf of the Government, was as follows :

SUPPLEMENTARY TREASURY AGREEMENT

(1) That it is the intention of the Government to conclude arrangements with all important firms engaged wholly or mainly upon engineering and shipbuilding work for war purposes, under which their profits will be limited with a view to securing that benefit resulting from the relaxation of trade restrictions or practices shall accrue to the State.

(2) That the relaxation of trade practices contemplated in the agreement relates solely to work done for war purposes during the war period.

(3) That in the case of the introduction of new inventions which were not in existence in the pre-war period the class of workmen to be employed on this work after the War shall be determined according to the practice prevailing before the War in the case of the class of work most nearly analogous.

(4) That on demand by the workmen the Government Department concerned will be prepared to certify whether the work in question is needed for war purposes.

(5) That the Government will undertake to use its influence to secure the restoration of previous conditions in every case after the War.

March 25th, 1915.

Further reference will have to be made to the proceedings at this Second Treasury Conference when we come to discuss the guarantees given by the Government that Trade Union customs would be restored at the end of the War.

Immediately upon the signature of the Agreement by the A.S.E., the seven members who had been appointed to act during the Treasury Conference were appointed as a standing National Labour Advisory Committee to act with the Government as a consultative body on all matters arising out of the Agreement. This Committee, which remained, at least theoretically, in existence throughout the war period, was formally appointed on the 31st March.

The effect of the Treasury Agreement was not to sweep away at once all Trade Union regulations preventing dilution of labour or substitution of one class of workers for another, but to lay

down a procedure under which Trade Union regulations could be abrogated in case of proved necessity. It was clear, therefore, that for the working of the Agreement local as well as central machinery would be required. At this stage the control of munitions production and the powers acquired by the Government under the Defence of the Realm Acts and the Treasury Agreement were in the hands of the War Office, which had established a special department to deal with contracts and supplies. This Department now proceeded to take steps designed to follow up and carry out the Treasury Agreement. On the 1st April, at the invitation of Lord Kitchener, the Secretary for War, representatives of the A.S.E. attended at the War Office and discussed the matter with him. On the 7th April the War Office issued a series of special posters and circulars urging men to transfer to munitions work, and on the following day the A.S.E. sent a letter to all its districts urging them to help the War Office by facilitating the transfer of labour.

On the 9th April a Local Armaments Committee for the North-East Coast was established at Newcastle under the auspices of the War Office. This was the first of a series of important Committees established in the principal munitions centres during April and May, similar Armaments Committees being set up on the Clyde on the 3rd May, at Manchester on the 5th May, and in other places. On the 20th April the War Office issued a special 'Memorandum of Instructions on the Establishment of Local Armaments Committees.'

There can be no doubt that at this stage it was the intention of those responsible, from the side of the Government, for the organization of munitions work, to initiate, through these Local Armaments Committees, a largely decentralized system of control. The early Armaments or Munitions Committees (for they passed under different names in different areas) were joint bodies, on which employers and Trade Unions were equally represented, the local representatives of the Government departments concerned being also members. Their powers were never at all clearly defined; but in the early stages they were encouraged to assume a large measure of initiative and responsibility in securing the adaptation of factories to the extension of war orders, in estab-

lishing national factories under their direct control, in arranging for necessary transference of labour, in seeking to reduce 'lost time' due to absenteeism, in dealing with departures from Trade Union conditions under the Shells and Fuses Agreement and the Treasury Agreement, and in many other matters. It seemed at the time that the Government had definitely embarked on a policy of devolving the actual control of the munitions industries upon the chosen representatives of the industries themselves. It was frequently said by Mr. Lloyd George and other Government spokesmen that the full output of munitions could be secured only with the full co-operation of employers and workers alike; and the Armaments Committees seemed to be a recognition, and were intended as a recognition, of the necessity for self-organization of the industries concerned in meeting the needs of war-time production.

The experiment of the Local Armaments Committees was, however, short-lived; for, although some of the Committees remained in existence until the autumn of 1915, no more were established after May, and those which were in existence complained that, one after another, their powers and duties were taken away from them by the Government.¹ The employers, too, were unwilling in most cases to agree to any real sharing of control with the Trade Union representatives, and withdrew many questions from the Committees, or refused to attend joint meetings with the workers. Slowly, what had been welcomed as a most hopeful experiment in industrial organization withered away. But, while they lasted, the Committees, especially on the Tyne and Clyde, did a good deal of valuable work. In April and May there arose a great, and for the most part artificially fostered, outcry about the growth of drinking and absenteeism among the workers. On the 29th March Mr. Lloyd George had stated that 'drink is a more dangerous enemy than Germany', and this had led to a big press campaign, in the course of which the Amalgamated Society of Engineers issued a challenge to Mr. Lloyd George to prove his statements. The reply was the White Paper (Report on Bad Timekeeping) issued on the 1st May. This did

¹ See Annual Report of the Engineering and Shipbuilding Trades Federation, 1915-16.

not show that drinking had increased during the War ; but it did show the existence of a good deal of avoidable absenteeism due to other causes as well as to drink. The evidence on which it was based was discredited largely by a reply issued by the National Labour Advisory Committee ; but the Local Armaments Committees, especially the Clyde Committee, set to work energetically to reduce absenteeism, and did much useful work in this, as well as in other directions, before they were superseded.

The form of organization which replaced the local representative Committees was strongly centralized and bureaucratic. It began with the establishment of the Ministry of Munitions, under the Ministry of Munitions Act passed on the 9th June 1915, and the transference to the new body of the functions of the War Office relating to munitions of war. The organization of the new Ministry, to which Mr. Lloyd George was appointed as Minister of Munitions, was largely based on that of the Employment Department of the Board of Trade, which subsequently, in 1917, became the nucleus of the new Ministry of Labour. Its tradition was that of strong central control, under a bureaucracy of powerful officials, some of the most influential of whom were now transferred to the Ministry of Munitions. The rather haphazard organization set on foot by the War Office was rapidly replaced by a strong central organization with its local offices and officials in all parts of the country acting under close supervision from the central office.

On the day following the passage of the Ministry of Munitions Act the Trade Unions which had been represented at the First Treasury Conference, with one or two additions, including the National Federation of Women Workers, which was now for the first time called into consultation, met the new Minister of Munitions at his own invitation. At this Conference, which was resumed on the 16th June, after an interval during which a Committee was engaged on drafting work, the first Munitions of War Bill was drafted and accepted, after some amendment by the Trade Unions concerned. The main purpose of the Bill was to give definite legislative sanction to the terms of the agreement already entered into, and to place certain of the measures which had already been undertaken with a view to the organization of

labour on a legal footing.¹ Part I gave legal sanction to the 'provisions for avoiding disputes' which had been recommended by the Committee on Production, and incorporated in the Treasury Agreement, and also enabled the Government, by Proclamation of any particular dispute, to apply compulsory arbitration during the war period to any industry or part of an industry. The miners and cotton operatives, among other groups, demanded exclusion from the scope of compulsory arbitration; and the Miners' Federation met Mr. Lloyd George and put forward the demand on the 25th June, the United Textile Factory Workers' Association making the same request of Mr. Henderson on the following day. Exclusion, however, was not secured; and the South Wales miners' dispute of July 1915 was in fact the first to be 'proclaimed' under the Act.

From the standpoint of this study, Part II of the Munitions of War Act, and the accompanying Schedule II, are by far the most important sections. Part II created a special class of 'controlled establishments', over which the Minister of Munitions acquired large powers. The undertaking given to the Amalgamated Society of Engineers on the 25th March that profits would be limited wherever dilution took place was also carried out by special clauses in the Bill limiting compulsory dilution to 'controlled establishments', and restricting profits in such establishments to a sum of one-fifth in excess of the standard pre-war profits, based on the average of the two years before the War.² The provisions for the suspension of Trade Union regulations embodied in the Treasury Agreement were greatly extended under clause 4, sub-clause (3) of the new Bill. It was there laid down as follows:

Any rule, practice or custom not having the force of law which tends to restrict production or employment shall be suspended in the establishment, and if any person induces or attempts to induce any other person (whether any particular person or generally) to comply, or continue to

¹ For the full provisions of the various Munion Acts, see the digest contained in Appendix B.

² This limitation was, in practice, very difficult to enforce, and admitted of all manner of exceptions and evasions. The 'munitions levy', as it was called, was subsequently, in May 1917, merged in the general 'Excess Profits Duty', to which the same difficulties applied.

comply, with such a rule, practice or custom, that person shall be guilty of an offence under this Act.

If any question arises whether any rule, practice or custom is a rule, practice or custom which tends to restrict production or employment, that question shall be referred to the Board of Trade, and the Board of Trade shall either determine the question themselves or, if they think it expedient or either party requires it, refer the question for settlement in accordance with the provisions contained in the First Schedule to this Act. The decision of the Board of Trade or arbitration tribunal, as the case may be, shall be conclusive for all purposes.

This, it is clear, went considerably farther than the purely voluntary suspension of Trade Union practices agreed to in March, which had been found too slow and difficult in operation to satisfy either the Government or the employers. The undertakings given by the Government in the Treasury Agreement in return for the concessions made by the Unions were also given legal sanction under the Bill, and applied specifically to all employers in 'controlled establishments'. Where dilution took place in establishments or industries which were not 'controlled', the Treasury Agreement remained in force without legal sanction behind it.

The sub-clause (Clause 4, sub-clause 4) applying the undertakings given in the Treasury Agreement to controlled establishments, and the schedule in which the operative clauses of the Agreement were embodied, are as follows :

The owner of the establishment shall be deemed to have entered into an undertaking to carry out the provisions set out in the Second Schedule to this Act, and any owner or contractor or sub-contractor who breaks or attempts to break such an undertaking shall be guilty of an offence under this Act.

SCHEDULE II

(Munitions of War Act, 1915)

1. Any departure during the War from the practice ruling in the workshops, shipyards and other industries prior to the War, shall only be for the period of the War.

2. No change in practice made during the War shall be allowed to prejudice the position of the workmen in the owners' employment, or of their Trade Unions, in regard to the resumption and maintenance after the War of any rules or customs existing prior to the War.

3. In any readjustment of staff which may have to be effected after

the War priority of employment will be given to workmen in the owners' employment at the beginning of the War who have been serving with the Colours or who were in the owners' employment when the establishment became a controlled establishment.

4. Where the custom of a shop is changed during the War by the introduction of semi-skilled men to perform work hitherto performed by a class of workmen of higher skill, the time and piece rates paid shall be the usual rates of the district for that class of work.

5. The relaxation of existing demarcation restrictions or admission of semi-skilled or female labour shall not affect adversely the rates customarily paid for the job. In cases where men who ordinarily do the work are adversely affected thereby, the necessary readjustments shall be made so that they can maintain their previous earnings.

6. A record of the departure from the conditions prevailing when the establishment became a controlled establishment shall be kept, and shall be open for inspection by the authorized representative of the Government.

7. Due notice shall be given to the workmen concerned, wherever practicable, of any changes of working conditions which it is desired to introduce as the result of the establishment becoming a controlled establishment, and opportunity for local consultation with workmen or their representatives shall be given if desired.

8. All differences with workmen engaged on Government work arising out of changes so introduced or with regard to wages or conditions of employment arising out of the War shall be settled in accordance with this Act without stoppage of work.

9. Nothing in this Schedule (except as provided by the third paragraph thereof) shall prejudice the position of employers or persons employed after the War.

Of the remaining clauses of the Bill, three are of importance for our purpose. Before the establishment of the Ministry of Munitions, steps were being taken to develop into a regular system the previous somewhat haphazard arrangements for the recruiting of skilled workers for munitions work. In May an Order limiting the mobility of labour had been issued under the Defence of the Realm Act already mentioned. On the 8th June the National Labour Advisory Committee issued a 'Memorandum on the Output of Munitions', in which was embodied what came to be known as the 'War Munitions Volunteers Scheme'. This was a scheme for the voluntary enrolment of skilled workers, who agreed to work, for a given period, at any controlled establishment to which the Ministry of Munitions might send them. Recruiting

under this scheme actually began on the 24th June, and on the 26th June the National Labour Advisory Committee issued a manifesto calling on munition workers to enrol. A clause giving legal sanction to the scheme and enabling penalties to be imposed on any volunteer who defaulted in his undertaking, was included in the Munitions of War Bill (Clause 6).

Clause 7 was the famous 'Leaving Certificate' clause, which led to so much trouble at a later stage. It developed further the restrictions on mobility of labour already imposed under the Defence of the Realm Acts. It will be necessary to deal with it further at a later stage ; and here it is enough to quote its actual wording.

LEAVING CERTIFICATE CLAUSE

(Munitions of War Act, 1915)

(1) A person shall not give employment to a workman, who has within the last previous six weeks, or such other period as may be provided by Order of the Minister of Munitions as respects any class of establishment, been employed on or in connection with munitions work in any establishment of a class to which the provisions of this section are applied by Order of the Minister of Munitions, unless he holds a certificate from the employer by whom he was last so employed that he left work with the consent of his employer or a certificate from the munitions tribunal that the consent has been unreasonably withheld.

(2) If any workman or his Trade Union representative complains to a munitions tribunal in accordance with rules made with respect to those tribunals that the consent of an employer has been unreasonably withheld that tribunal may, after examining into the case, if they think fit, grant a certificate which shall, for the purposes of this section, have the same effect as a certificate from the employer.

(3) If any person gives employment in contravention of the provisions of this section, he shall be guilty of an offence under this Act.

To carry out the penal provisions of the Act, munitions tribunals, consisting of an impartial chairman, always a lawyer, with assessors representing employers and workers, were established (Clause 15). The clause in the Defence of the Realm Act passed in March, which has been mentioned above, was also amended so as to empower the Government

To regulate or restrict the carrying on of any work in any factory, workshop or other premises, or the engagement or employment of any

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workman or all or any classes of workmen therein, or to remove the plant therefrom with a view to maintaining or increasing the production of munitions in other factories, workshops or premises, or to regulate and control the supply of metals and material that may be required for any articles for use in war.

In the form described, the Munitions of War Bill passed through all its stages in the House of Commons during June, and became law on the 2nd July 1915.

CHAPTER VI

THE DILUTION OF LABOUR

DURING the first six months of 1915, while the negotiations and conferences, and the departmental reorganization which led up to the Munitions Act, were in progress, the process of 'dilution', that is, of the extended employment of less skilled men and women on munitions work, was being steadily extended, both under the Shells and Fuses Agreement of the 5th March, and under the far more general provisions of the Treasury Agreement. In March, immediately after the signing of the former agreement, the Women's Trade Union League and the National Federation of Women Workers¹ opened, under the direction of Miss Mary Macarthur and Miss Susan Lawrence, a special campaign for the organization of women employed on munitions work. The general labour Unions, enrolling both men and women of the less skilled grades, also became active, and Trade Union membership began rapidly to increase. In June the Amalgamated Society of Engineers, which had had before it the question of admitting women into its ranks, decided, in preference to organizing the women 'dilutees', to enter into a close alliance with the National Federation of Women Workers; and, on the 19th June, it issued a special circular to all its districts urging them to co-operate with the N.F.W.W. in securing the enrolment of all women munition workers in its ranks. In some areas this alliance worked well: in others hardly at all. In nearly all cases the majority of the women remained unorganized; and, of those who were organized, a rather larger number over the whole country joined the 'mixed' general labour Unions than became members of the N.F.W.W.

¹ The Women's Trade Union League was a federation of Unions, enrolling men as well as women, interested in the organization of women workers. Its principle was, where a 'mixed' craft or industrial Union was available, to hand over to it the women it organized. Those for whom no such Union was available it enrolled in the National Federation of Women Workers, a women's Union with which it worked in close partnership. In practice the two bodies were led by the same people.

From the first, a great deal of trouble arose concerning the rates of wages to be paid to the fresh labour introduced on munitions work, and especially to women. In the Shells and Fuses Agreement, the only specification relating to wages was that 'where semi-skilled or female labour is employed *in place of skilled labour* the rates paid shall be the usual rates of the district obtaining for the operations performed' (Clause 6, see p. 68). This provision in practice did not apply to the vast majority of the cases in which women were introduced during the early period of dilution; for the introduction took place at this stage mainly on operations which could not be regarded as purely skilled men's work, or at least which the employers refused to regard as such. The absence of any provision regulating the rates to be paid to women on semi-skilled and unskilled work was an omission which knocked the bottom out of the Shells and Fuses Agreement. A few days after the agreement was signed, the Engineering Employers' Federation issued to its members a circular instruction, in which it was laid down that 'Female labour undertaking the work of semi-skilled or unskilled men shall be paid the recognized rates of the district for *youths* on the operations in question'. In a communication to the Trade Unions made at about the same time, the employers varied the formula by stating that the rates to be paid in the cases mentioned should be 'the recognized rates of the district for *female labour* on the operations in question'. This meant nothing; for in most districts there were no such recognized rates.

The Amalgamated Society of Engineers immediately challenged this interpretation of the agreement, and issued a counter instruction to its districts, stating that 'Female labour undertaking the work of semi-skilled or unskilled men must receive the rates paid to the *men they displace*'. A conference between the parties to the agreement followed on the 30th April, but no settlement was reached. Thereafter there was continuous bickering in all districts in which women were introduced; but, in the vast majority of cases, the Trade Unions failed to carry their point, and, for the remainder of the year, the employers practically paid the women what they chose.

The specifications of the Treasury Agreement concerning the

rates to be paid to female labour were more precise. It was laid down as follows :

Where the custom of a shop is changed during the War by the introduction of semi-skilled men to perform work hitherto performed by a class of workmen of higher skill, the rates paid shall be the usual rates of the district for that class of work.

The relaxation of existing demarcation restrictions or admission of semi-skilled or female labour shall not affect adversely the rates customarily paid for the job. In cases where men who ordinarily do the work are adversely affected thereby, the necessary readjustments shall be made so that they can maintain their previous earnings.

Round the second of these clauses a great deal of controversy rages. Miss Sylvia Pankhurst, immediately after the signing of the agreement, wrote to Mr. Lloyd George asking for his interpretation of the clause, and received the following reply :

March 26, 1915.

DEAR MISS PANKHURST,—The words which you quote would guarantee that women undertaking the work of men would get the same piece rates as men were receiving before the date of this agreement. That, of course, means that if the women turn out the same quantity of work as men employed on the same job, they will receive exactly the same pay.—Yours sincerely,

(Signed) D. LLOYD GEORGE.

Miss Pankhurst replied as follows, but seems to have received no further answer :

DEAR MR. LLOYD GEORGE,—Many thanks for your letter with its valuable explanation that women are to receive the 'same piece-work rates as men were receiving before the date of this agreement'. I conclude that the women will also receive any war bonus and increase of wages as a result of the War, which would have been paid had men been employed. It is important to know also, whether the same time rates are to apply in the case of women as those which were paid to men ; because if this were not the case, employers might merely engage women to work on time rates to avoid paying the standard rate to them.

I hope that you will be able to give me a definite answer on this point, as you will understand how anxious women are in regard to the matter.

Thus it appears that, in Mr. Lloyd George's view, the effect of the Treasury Agreement was to secure to women and to other workers introduced under dilution (except semi-skilled men taking the place of skilled men) equal *piece rates*, but not equal

time rates. Semi-skilled men replacing skilled men alone were guaranteed the time rates of those whom they displaced.

Even Mr. Lloyd George's interpretation, however, was by no means accepted by the employers, who contended, first, that as skilled men were not available, no displacement was occurring, and therefore the guarantees did not apply.¹ 'If there is no skilled labour available, it is not displaced.' This argument, however, so plainly made nonsense of the whole of the agreements that it was not seriously followed up. Far more important was the contention that the test of the rates to be paid should be the cost of the job to the employer, and that less productivity on the part of the women, involving a heavier oncost on the job, was a reason for reducing the piece rate as well as the time rate. Sometimes the employers went even further, and claimed to debit the women's labour with the cost of the new machinery which they had introduced. The following dialogue should make this point clear :

'We are to take it then that the same rates will be paid.'

'The same rates for what?'

'The same rates for female labour as have been paid for the operation previously.'

'No, I do not think you are entitled to that for this reason : that if we put in £5,000 worth of war plant the most you are entitled to say is that the product from that plant should cost the same, whether we have female or male labour. You cannot say, under the special circumstances of to-day, that the employment of female labour shall make this product more expensive to the country. If you ask for the same rates—day rate or piece work—you will make it more costly.'²

The unsatisfactory position in relation to women's wages had come, by July, to occupy a considerable part of the attention of the Trade Unions. Full particulars of the rates which were being paid were collected during the month both by the National Federation of Women Workers and by the A.S.E., and a series of special conferences was held between the two bodies for the purpose of considering the position. The N.F.W.W. considered

¹ An employers' representative at a Joint Local Conference of the Engineering Employers' Association and the Trades Unions concerned, held at Manchester, the 27th July 1915.

² Extract from the notes of the Conference referred to in the previous foot-note.

that all the specifications of the Treasury Agreement would be useless unless some sort of definite minimum standard rate or rates of wages were laid down and made obligatory upon all employers. The A.S.E. finally accepted this point of view with some hesitation, because they feared that it might prejudice, or even nullify, the demand for equal rates for men and women. In practice, however, they were finding this claim so difficult to make good, and the actual rates paid were so low, that they decided, early in August, to adopt the women's claim for a minimum rate. Accordingly, the following letter was dispatched to the Minister of Munitions on the 18th August.

To the Right Hon. D. Lloyd George,
Minister of Munitions,
6 Whitehall Gardens, S.W.

DEAR SIR,

My Executive Council have had under consideration for some considerable time the question of wage rates for women engaged on Munitions of War.

We have had many conferences with the Federation of Women Workers, and also with the various Trade Unions concerned in the engineering industry. On behalf of all these Societies my Executive Council, as a result of a national conference between these bodies, are approaching you asking you to be good enough to receive a deputation from them to consider the following proposal, viz. :

Women over 18 when employed on any operation in connection with shells and fuses and all work in engineering establishments on munitions of war which necessitates machine operations for which tools and the setting up of machines is performed by skilled or semi-skilled labour shall receive not less than £1 per week for a normal working week as recognized prior to the War, except where such work prior to the War has been recognized as women's work by the A.S.E. and Allied Trades in the district or districts concerned.

I am further directed to ask you to be good enough to receive the representatives of the Allied Trades, together with the Federation of Women Workers, at your office in London some time on Tuesday next, 24th instant, and to further ask you to be good enough to place at our disposal a room in your building for one hour previous to the time fixed for the meeting with you.

We shall be glad if you will kindly regard this as an urgent matter, and notify my Executive Council of your decision at the earliest moment.

Yours faithfully,

p.p. ROBERT YOUNG,

Gen. Sec.

At the meeting which followed, it was promised that consideration would be given to this demand; but no immediate action was taken. It was pointed out that the Minister of Munitions had not adequate powers to enforce minimum rates of wages. The Unions did not let the matter drop; and, as we shall see, after much negotiation a legal minimum wage for women, as well as for male 'dilutees', was at last secured through the Munitions of War (Amendment) Act of 1916.¹

Before we discuss the developments which led up to this measure, it is necessary to deal with the important changes in relation to dilution which took place in the autumn of 1915. On the 16th and 17th September a Conference of Trade Unions concerned in the Munitions Act met at the summons of the Amalgamated Society of Engineers, and passed a series of resolutions embodying complaints against the working of the Act and the methods by which dilution was being introduced. Mr. Lloyd George addressed the Conference, and promised that the grievances would be remedied; and a resolution pledging the Unions to co-operate in the development of dilution was thereupon carried. The first step in fulfilment of the pledges given by Mr. Lloyd George was the establishment, on the 22nd September, of the Central Munitions Labour Supply Committee, on which the Trade Unions, the employers, and the Government were all represented. The Women Workers secured a representative—Miss Mary Macarthur—on the Committee, and their position as representing a section vitally interested in dilution was thus recognized.

This Committee, one of the most important of the war period from the standpoint of this study, at once set to work to regularise the whole process of dilution by preparing a comprehensive scheme for general adoption. During October this process was completed, and a series of Reports, embodying the proposals of the Committee, and dealing with the methods to be adopted in introductory dilution, and the rates of wages to be paid to both male and female dilutees, was submitted to the Ministry of Munitions. These Reports were accepted by the Minister, and ordered to be adopted in factories under the direct control of the

¹ For the full provisions of the various Munitions Acts, see the digest contained in Appendix B.

Ministry of Munitions, and recommended to the favourable consideration of firms engaged on munition work. The whole series of Reports, subsequently known as the 'L' Circulars, exercised so far-reaching an influence that the five most important must be quoted in full.

CIRCULAR L 1

(November, 1915)

Ministry of Munitions of War,
6 Whitehall Gardens,
London, S.W.

SIR,—I am directed by the Minister of Munitions to enclose for your information copy of the recommendations of the Munitions Labour Supply Committee with reference to—

- (a) The employment and remuneration of women in munition work of a class which prior to the War was not recognized as women's work in districts where such work was customarily carried on.
- (b) The employment and remuneration of semi-skilled and unskilled men on munition work of a class which prior to the War was customarily undertaken by skilled labour.

I am to inform you that the Minister has decided to adopt the Committee's recommendations as regards munition factories for which the Ministry is responsible, and also to commend them to the favourable consideration of other employers engaged on munition work.

I am, sir, your obedient servant,

H. LLEWELLYN SMITH.

CIRCULAR L 2

PAYMENT OF WOMEN NOT ON RECOGNIZED WOMEN'S WORK

Ministry of Munitions.

Munitions Labour Supply Committee.

Recommendations relating to the employment and remuneration of women on munition work of a class which prior to the War was not recognized as women's work in districts where such work was customarily carried on.

(NOTE.—These recommendations are on the basis of the setting up of the machines being otherwise provided for. They are strictly confined to the war period and are subject to the observance of the provisions of Schedule II of the Munitions of War Act.¹

1. Women of 18 years of age and over employed on time, on work customarily done by men, shall be rated at £1 per week, reckoned on the

¹ Given in full on pp. 79–80.

usual working hours of the district in question for men in engineering establishments.

This, however, shall not apply in the case of women employed on work customarily done by fully skilled tradesmen, in which case the women shall be paid the time rates of the tradesmen whose work they undertake. Overtime and night shift and Sunday and holiday allowances payable to men shall also be made to women.

2. Where women are prevented from working, owing to breakdown, air raid, or other causes beyond their control, they shall be paid for the time so lost at the rate of 15s. a week as above, unless they are sent home.

3. Women shall not be put on piece work or premium bonus systems until sufficiently qualified. The period of qualification on shell work shall not, in general case, exceed three to four weeks.

4. Where women are employed on piece work they shall be paid the same piece-work prices as are customarily paid to men for the job.

5. Where women are engaged on premium bonus systems the time allowed for a job shall be that customarily allowed to men for the same job, and the earnings of the women shall be calculated on the basis of the man's time rate.

6. Where the job in question has not hitherto been done on piece work or premium bonus system in the establishment, the piece-work price, or the time allowed, shall be based on a similar job previously done by men, on piece work or premium bonus system as the case may be.

7. Where in the establishment in question there are no data from previous operations to enable the parties to arrive at a piece-work price or time to be allowed, the price or the time to be allowed shall be so adjusted that the women shall receive the same percentage over the time rate of the class of men customarily employed on the job, as such man would have received had he undertaken the job on piece work or premium bonus system as the case may be.

8. The principle upon which the recommendations proceed is that on systems of payment by results equal payment shall be made to women as to the men for an equal amount of work done.

9. Piece-work prices and premium bonus basis times shall be fixed by mutual agreement between the employer and the woman or women who perform the work.

10. On piece work, every woman's time rate, as per Clause 1 hereof, shall be guaranteed irrespective of her piece-work earnings. Debit balances shall not be carried forward beyond the usual weekly period of settlement.

11. On premium bonus systems, every woman's time rate as per Clause 1 hereof shall in all cases be paid.

12. Overtime and night shift and Sunday and holiday allowances shall be paid to women employed on piece work or premium bonus system

on the same conditions as now prevail in the case of men in the district in question for time work.

13. Piece-work prices and premium bonus time allowances, after they have been established, shall not be altered unless the means or method of manufacture are changed.

14. All wages and balances shall be paid to women through the office.

15. Any question which arises as to the interpretation of these recommendations shall be determined by the Minister of Munitions.

October 1915.

CIRCULAR L 3

PAYMENT OF MEN ON SKILLED WORK

Ministry of Munitions.

Munitions Labour Supply Committee

Recommendations relating to the employment and remuneration of semi-skilled and unskilled men on munition work of a class which prior to the War was customarily undertaken by skilled labour.

(NOTE.—These recommendations are strictly confined to the war period and are subject to the observance of Schedule II of the Munitions of War Act.¹)

General.

1. Operations on which skilled men are at present employed, but which by reason of their character can be performed by semi-skilled or unskilled labour, may be done by such labour during the period of the War.

2. Where semi-skilled or unskilled male labour is employed on work identical with that customarily undertaken by skilled labour, the time rates and piece prices and premium bonus times shall be the same as customarily obtain for the operations when performed by skilled labour.

3. Where skilled men are at present employed they shall not be displaced by less skilled labour unless other skilled employment is offered to them there or elsewhere.

4. Piece-work prices and premium bonus time allowances, after they have been established, shall not be altered unless the means or method of manufacture are changed.

5. Overtime, night shift, Sunday and holiday allowances shall be paid to such machinemen on the same basis as to skilled men.

Time ratings for the manufacture of complete shell and fuses and cartridge cases, where not hitherto customary.

6. Where the manufacture of this class of munitions was not customarily undertaken by the establishment prior to the War, the following time ratings shall apply :

(a) Semi-skilled and unskilled men of 21 years of age and over, when engaged as machinemen on the above manufacture, shall be

¹ Given in full on pp. 79-80.

paid a time rate of 10s. per week lower than the time rate for turners, including war bonuses, engaged in the engineering trade of the district, but in no case shall the rate paid to such men be less than 28s. per week of the normal district hours. This rate also includes all war bonuses already granted.

(b) Where a semi-skilled or unskilled man of 21 years of age and over has had no experience previously of the operation he is called upon to perform, his starting rate shall be 26s. per week, which shall be paid during his period of training, but such period shall not exceed two months from the date on which he commenced work as a machine-man.

(c) The time rates payable to setters up shall be not less than as follows :

Setting up of fuse-making machines, 10s. per week over the current district time rate for turners.

Setting up of shell-making machines, 5s. per week over the current time rate for turners.

These extras are in addition to any war bonuses which have been granted.

Interpretation.

7. Any question which arises as to the interpretation of these recommendations shall be determined by the Minister of Munitions.

October 1915.

CIRCULAR L 5

REPORT ON DILUTION OF LABOUR

Central Munitions Labour Supply Committee

REPORT TO MINISTER OF MUNITIONS re DILUTION OF SKILLED LABOUR

I.—Minister's Circular to Controlled Establishments.

In his circular letter to the controlled establishments the Minister stated that he had reason to believe that skilled workmen were being employed in too large a proportion to semi-skilled or unskilled workmen.

He further stated that he was convinced that it would be quite impossible to satisfy the urgent and prospective demand for skilled workmen unless their employment is strictly limited to work for which their special skill is essential and which cannot be performed in whole or part by semi-skilled or unskilled labour, either of men or women.

II.—Interim Report by Committee.

In their Interim Report the Committee, following on the above action by the Minister, submitted an outline of a scheme for dilution of skilled labour by the introduction of semi-skilled and unskilled male and female labour.

III.—Interim Report Accepted by Minister.

The Minister having accepted their proposals on this point, the Committee submit, for the consideration of the Minister, the details of the scheme of dilution.

IV.—Conditions of Employment.

The terms upon which labour to be introduced in accordance with the schedule is to be employed are contained in Circular Letters L 2 and L 3 attached hereto.

The terms as hereto laid down do not, however, cover the cases of males under 21 years of age and females under 18 years of age. It is understood that the Ministry desire to give further consideration to the proposals of the Committee on these points before issue.

V.—Standardisation of Working Conditions and Procedure.

The Committee are of opinion that it would be in the general interest if notes were issued from time to time for the information and guidance of controlled establishments.

These notes should advise how points covered by the Act coming within the scope of the Committee's reference should be dealt with, should give to those concerned the benefit of any useful information possessed by the Ministry, and should be of such a nature generally as would encourage the employers and workpeople to seek advice from the Ministry on contentious points and so avoid differences arising as far as possible.

In order to obtain information as to questions which might be a source of difference, the Committee have interviewed representatives of several leading firms who have had experience of dilution of skilled labour. The Committee have embodied in the notes appended hereto the principal points brought out at these interviews, and they now submit these notes for approval and issue by the Minister.

VI.—Dilution Scheme Proposed.

1. The principle of the scheme is that no skilled man should be employed on work which can be done by semi-skilled or unskilled male or female labour.

2. The principle cannot be applied to all establishments in the same degree—for example, in a shop doing repetition work the scheme is generally applicable, whereas in a marine engineering or repairing works the scheme would be applicable to a less extent.

3. It will be necessary to have a special survey of shops by fully qualified technical inspectors, as far as possible specially conversant with the employment of semi-skilled and female labour, who could advise the Ministry on the extent to which the dilution could take place, and assist the employers in the process.

4. (a) The returns on the schedules issued with C.E.I. and 3-8 forms should be divided into

(i) Cases in which it seems clear that some men are available for enrolment and transfer.

(ii) Cases requiring special attention.

(b) Class i. cases will be referred to the Local Labour Exchange manager—acting as labour supply officer of the Ministry—to visit the works and arrange for the enrolment of the men. He will report any action taken to the local Advisory Board at a joint meeting, bringing before them also for further action those cases in which there have been insufficient enrolments. Objections raised by the workmen to the dilution of skilled labour shall be reported by the labour supply officer to the Minister, who shall, if the question is purely a local question, remit the same for settlement by the labour officer in conjunction with the local Advisory Board. He will, whenever this seems advisable, be accompanied to the works by a representative of the local Advisory Board to assist in securing enrolments.

(c) Class ii. cases will be, according to the circumstances in each case, referred either to the superintending engineer or to the labour officer, or to a special investigator from the Ministry, as may be deemed necessary. In each case the objective of the visit will be to clear the way for subsequent enrolment and transfer. The labour supply officer will, whenever convenient, accompany the engineer or other special investigator for this purpose.

(d) All officers visiting the works for the purposes specified above will be furnished with warrants showing their authority, and the way will have been prepared for them by the circular to the firms.

(e) The transference will be undertaken locally by the labour supply officer, and the men will be transferred to firms indicated to him by the Ministry as being establishments in which the need is most urgent. In determining the urgency of any firm's requirements the Ministry should have regard amongst other considerations to the extent to which dilution has taken place in the establishment in question.

(f) Men will be enrolled on the existing War Munition Volunteer terms, and disputed questions as to subsistence allowances and other payments to them will be referred to the Labour Advisory Boards at joint meetings with the labour supply officers.

5. The skilled workmen released should be dealt with in the following sequence :

(a) Arrangements should be made for working full 24 hours per day as far as practicable on all machines.

(b) The extra requirements of the district should be satisfied.

(c) Any volunteer workmen who are working in the district and belong to another district should be returned if possible to their

district of origin and replaced by men released as a result of dilution.

(d) Only the surplus then available should be sent to other districts.

(e) The foregoing shall not apply to demands for labour certified by the Minister as urgent.

6. Returns regarding the number of machines of the various classes in the various factories should be examined in order to check the views of firms regarding the dilution, and enable the technical inspector to arrive at a conclusion on that subject.

7. Where it is found that firms are not running full day and night shift owing to lack of orders for munition work, the matter should be taken up with the Director-General of Munitions Supply, so that if possible further orders may be issued. Similarly in cases where the cause is lack of material, &c.

8. The Central Committee should be kept posted by the local officers, through the Department, of all difficulties and questions of importance arising out of the dilution of skilled labour.

9. Executive action by the Ministry should be subject to the advice and assistance of the Central Committee, in so far as it affects questions of policy relating to the dilution of skilled labour.

10. The services of the Local Labour Advisory Boards should be fully taken advantage of in respect of local difficulties which may arise out of the dilution of skilled labour.

VII.—Recommendation.

The Committee recommend the foregoing to the favourable consideration of the Minister, and are of opinion that the scheme of dilution as now submitted should, as approved, be put into operation as early as possible.

VIII.—Appendices.

Appendix A.—Proposed notes for the guidance of controlled establishments.

Appendix B.—Printed documents L 2 and L 3 relating to wages of semi-skilled and unskilled male and female labour.

(Signed) Chairman of Munitions Labour
Supply Committee.

October 25th, 1915.

CIRCULAR L 6

NOTES FOR GUIDANCE OF CONTROLLED ESTABLISHMENTS

A.—Alterations in Working Conditions.

Schedule II, paragraph 7, provides : ‘ Due notice shall be given to the workmen concerned, wherever practicable, of any changes of working conditions which it is desired to introduce as the result of the establishment

becoming a controlled establishment, and opportunity for local consultation with workmen or their representatives shall be given if desired.'

Procedure.—The Minister is of opinion that the following procedure should be adopted by a controlled establishment when any change is made in working conditions :

1. The workmen in the shop in which a change is to be made should be requested by the employer to appoint a deputation of their number, together with their local Trade Union representative if they desire, to whom particulars of the proposed change could be explained.

2. At the interview the employer, after explaining the change proposed and giving the date when it is to come into operation, should give the deputation full opportunity of raising any points they desire in connection therewith, so that if possible the introduction may be made with the consent of all parties.

3. Should the deputation be unable at the interview to concur in the change, opportunity should be given for further local consultation when representatives of the Trade Unions concerned might be present.

4. It is not intended that the introduction of the change should be delayed until concurrence of the workpeople is obtained. The change should be introduced after a reasonable time, and if the workpeople or their representatives desire to bring forward any question relating thereto they should follow the procedure laid down in Part I of the Act.

5. It is not desirable that formal announcement of the proposed change should be put on the notice board of the shop until intimation has been given as above to the men concerned or their Trade Union representative.

While this is so the Minister is of opinion that it will be consistent with prudence that every endeavour should be made by employers to secure the co-operation of their workpeople in matters of this description.

Any difficulties experienced by either employers or workpeople should be at once referred to the Ministry in order that an immediate endeavour may be made to find a satisfactory solution.

B.—Shell Work.

It would appear desirable that women under 18 years of age should not be employed on shell over six-pounders.

C.—Women on Skilled Work.

The Minister is of opinion that before female labour is hereafter employed in the highly skilled branches of the engineering trades the proposal of the employer in question should be submitted to the Ministry for approval.

D.—Working Hours.

The desirability of working the three-shift system, as compared with the two-shift system, when this is otherwise feasible, has been referred by the Minister to the Committee appointed by him regarding industrial fatigue and hours of labour for consideration and report.

E.—Sunday Work.

This question has also been referred by the Minister to the Committee above named.

F.—Superintendence of Female Labour.

The Minister is of opinion that where females are employed they should be supervised by a forewoman, who should act as intermediary between the workers and the shop foreman or manager.

G.—Provision of Overalls and Caps.

In the interest of safety the Minister recommends that female workers should be supplied by the employers with caps and overalls and that suitable arrangements should be made for the necessary washing of these.

H.—Night Shifts.

It appears desirable that where two shifts are in operation female labour should, as far as is reasonably practicable, be employed on the day shift rather than on the night shift.

I.—Suitable Occupations.

While it is not possible at this stage to indicate fully the occupations in which women may be employed, the following may serve as a guide :

(i) Hand work.—Inspection and viewing, especially those processes which do not involve the use of appliances of precision. Assembling, welding (mechanical) small parts. Armature winding. Taping armature coils. Armament core building. Painting and varnishing of shells.

(ii) Machine work.—Automatic machines. Semi-automatic machines, where operations are within the limits of a woman's physical capacity. Generally, work of suitable dimensions and of a repetitive character.

(iii) Storekeepers and timekeepers.

J.—Accommodation for Females.

It is essential that suitable lavatory and cloak room accommodation, with the necessary female attendants, should be provided for the exclusive use of female labour employed.

K.—Suggestions.

The Minister will be glad to receive any suggestions for incorporation in subsequent issues of these notes, and particularly will be glad to receive a note of the difficulties any establishments may have experienced in connection with their labour, and what measures were adopted to adjust the difference. The Minister feels that it is important that all firms should have as much information as possible of the experience of others so that they may benefit thereby.

All these documents are of the first importance for the under-

standing of war-time dilution. The two last, laying down the procedure to be adopted for the introduction of dilution, were never legally binding, despite repeated attempts by the Trade Unions to secure their incorporation in the successive measures amending the Munitions Act of 1915. They were often disregarded with impunity; but their existence and the general approval given to them by the Ministry of Munitions made it more difficult for employers to introduce or extend dilution without some consultation, and thereby eliminated some of the friction which had arisen during the earlier period. Circular L 3 was fairly generally observed, and led to comparatively few disputes; for the employers were usually far more willing to pay the prescribed rates to male than to female dilutees. By far the most important document was Circular L 2. This, it will be noted, did not govern the remuneration of all women employed on munitions, but only of those engaged on 'work not recognized as women's work before the War in districts where such work was customarily carried on'. This definition proved, in practice, to be very ambiguous, and constant disputes arose as to the classes of work which fell within it; but, at its narrowest, it was considerably wider than the rival definition 'work recognized as men's work', which it had been previously attempted to adopt. So far as the women who fell within the scope were concerned, it was laid down not only that a minimum wage of £1 a week should be paid, but also that women engaged on 'work customarily done by fully-skilled tradesmen' should receive the time rates paid to the class of tradesmen in question, and that, in all cases, the piece rates customarily paid to men should be paid to women also.

It was, however, one thing to get these principles laid down by the Committee, and platonically approved by the Ministry of Munitions, and quite another to get them enforced in practice. When, therefore, the Minister forwarded Circular L 1 (see p. 88 above) to the Amalgamated Society of Engineers, and asked for their co-operation, the Executive Council at once replied that a mere recommendation of the proposed rates to employers was quite useless, and that steps must be taken to ensure that they were actually paid. A Conference between the A.S.E. and the Central Munitions Labour Supply Committee followed on the

27th October, and the dilution scheme was approved, subject to the following reservations :

That in order for the owners of controlled establishments to secure the co-operation of the Ministry of Munitions (Labour Supply Committee) and the Amalgamated Society of Engineers in introducing the scheme for the 'dilution of labour', it shall be incumbent on such employers that they must observe the rates and conditions of labour as governed by Circulars L 2 and L 3.

Nothing in L 3 relating to wages shall prejudice the Union's (Amalgamated Society of Engineers) right to raise the wages references, which for Manchester and Oldham are already placed on the agenda for Central Conference with the Engineering Employers' Federation.

Signed on behalf of the Central Munitions Labour Supply Committee :

ARTHUR HENDERSON, Chairman.

On behalf of the Amalgamated Society of Engineers :

JAS. T. BROWNLIE, Chairman.

ROBERT YOUNG, General Secretary.

Approved by :

D. LLOYD GEORGE, the Minister of
Munitions.

This, however, was only the beginning of the struggle ; for, although some improvement in the rates paid to women took place after the issue of the ' L ' Circulars in November, there was nothing like a general adoption of the conditions prescribed. Rates of 12s. and 15s. a week remained common for adult women whose occupations fell within the scope of Circular L 2, and dilution was freely introduced without the forms of consultation prescribed in Circular L 6. An estimate of the position can be gained from the fact that women employed on munition work in the Midlands secured considerable advances in wages under an agreement concluded in November 1915 between the Workers' Union and the Midland Employers' Federation. This agreement fixed, for the normal engineering week of 53 hours, time rates ranging from 7s. at 14 to 16s. at 21 years of age. A very similar agreement concluded in the north-western area also resulted in considerable advances. In the same month a dispute took place in Scotland, where thousands of women were being employed on shell-making at 15s. a week for adults. The Amalgamated Society of Engineers and the National Federation of Women Workers joined forces, and the Ministry of Munitions was com-

pelled to write the firm concerned a strong letter, drawing its attention to the terms of Circular L 2, with the result that a bonus of 5s. was at once conceded, although the firm had previously refused altogether to recognize the women's Union or their right to collective bargaining.

It was manifest, however, that these piecemeal methods of raising women's wages were wholly inadequate; and the Trade Unions accordingly resumed their pressure upon the Ministry of Munitions to secure the universal enforcement of Circulars L 2 and L 3, and of the conditions laid down for the introduction of dilution. At this time the necessity for a measure to amend the Munitions of War Act passed in July had become manifest. The struggle of the Trade Unions to secure the amendment of the Act in such a way as to redress their other grievances is dealt with later in this study; but one of the principal points at issue throughout the negotiations falls within the scope of this chapter. The Trade Unions pressed continually for the legal enforcement of the rates laid down in Circulars L 2 and L 3, and of the conditions contained in Circular L 6.

When the first draft of the amending Bill was issued on the 9th December, it was found to contain a clause enabling the Minister of Munitions to prescribe and enforce rates of wages and conditions of employment for any women employed on munition work in establishments in which they were subject to the provisions of Section 7 of the Munitions Act—the famous 'Leaving Certificate' clause.¹ Nothing was, however, done to make either Circular L 3 or Circular L 6 enforceable. The Amalgamated Society of Engineers at once declared its co-operation in dilution to be conditional on the complete legal enforcement of Circulars L 2 and L 3, and also pressed strongly for the legalization of Circular L 6. It was, moreover, pointed out that the mere taking of power by the Minister to fix wages for women was no guarantee that he would actually do so, or that if he did, the rates prescribed would be those laid down in the Circulars. More explicit assurances were accordingly asked for, as well as further amendments to the Bill. The history of the negotiations which followed is told in the next chapter; but it was not until after a protracted

¹ See *ante*, p. 81, and later, pp. 151 ff.

struggle, in the course of which Mr. Lloyd George ascertained for himself the state of feeling by visiting some of the most important munition centres, where he had a warm reception,¹ that further concessions were secured. Finally, explicit assurances were given that both L 2 and L 3 would be generally enforced, and that use would be made of the powers to fix rates of wages taken under the amending Bill. Big further promises were made of the redress of other grievances ; and the Munitions of War (Amendment) Act, 1916, was finally passed on the 27th January, the Trade Unions, in return for the concessions made, promising full concurrence in the working of dilution. The following are the sections in the Act of 1916 by which the Minister of Munitions took the necessary power to fix wage rates for both women and men :

6. Where female workers are employed on or in connection with munition work in any establishment of a class to which the provisions of Section 7 of the principal Act as amended by this Act are for the time being applied by an Order made thereunder, the Minister of Munitions shall have power by Order to give directions as to the rate of wages, or (subject, so far as the matter is one which is dealt with by the Factory and Workshops Acts, 1901 to 1911, to the concurrence of the Secretary of State) as to the hours of labour or conditions of employment of the female workers so employed.

Any directions given by the Minister of Munitions under this Section shall be binding on the owner of the establishment and any contractor or sub-contractor employing labour therein and the female workers to whom the directions relate, and any contravention thereof or non-compliance therewith shall be punishable, in like manner as if the Order in which the direction is contained was an award made in settlement of a difference under Part I of the principal Act.

No direction given under this Section shall be deemed to relieve the occupier of any factory or workshop from the obligation to comply with the provisions of the Factory and Workshops Acts, 1901 to 1911, or of any Orders or regulations made thereunder, or to affect the liability of any person to be proceeded against for an offence under the Employment of Children Act, 1903, so however that no person be twice punished for the same offence.

¹ On the Tyne he was met with the following resolution : ' That we, as an Executive Council, are not prepared to take part in any Conference which has for its object the dilution of skilled labour, until the Minister of Munitions takes steps to render legal and mandatory the rates of pay and conditions of labour to those semi-skilled and unskilled men who may take the places of those of our members transferred to more highly skilled work.'

7. The Minister of Munitions shall have power 'by Order to give directions' as to the rate of wages, hours of labour, or conditions of employment of semi-skilled and unskilled men employed in any controlled establishment on munition work, being work of a class which, prior to the War, was customarily undertaken by skilled labour, or as to the time rates for the manufacture of complete shell and fuses and cartridge cases in any controlled establishment in which such manufacture was not customary prior to the War; and any direction so given shall be binding on the owner of the establishment and any contractor or subcontractor employing labour therein, and the workers to whom the directions relate, and any contravention thereof or non-compliance therewith shall be punishable in like manner as if the Order in which the direction is contained was an award made in settlement of a difference under Part I of the principal Act.

8. (1) The Minister of Munitions may constitute special arbitration tribunals to deal with differences reported under Part I of the principal Act which relate to matters in which the Minister of Munitions and the Board of Trade may refer any such difference for settlement to such a tribunal in lieu of referring it for settlement in accordance with the First Schedule to the principal Act.

(2) The Minister of Munitions may also refer to a special arbitration tribunal so constituted, for advice, any question as to what directions are to be given by him under the said Sections.

(3) The tribunal to which matters and questions relating to female workers are to be referred under this Section shall include one or more women,

It will be noted that the powers taken to fix wages and conditions were very much wider in the case of women than of men. In the latter case the Minister's powers were limited to semi-skilled or unskilled men taking the place of skilled men, whereas rates might be for all classes of women who were subject to the 'Leaving Certificate' clause of the Act of 1915.

The orders under the new Act making Circular L 2 and L 3 mandatory were issued in February 1916; but, as the following account of their operation, written by a very competent observer, shows, this by no means solved the problem so far as women were concerned:

Meanwhile, the new protection afforded by the Government to munition workers was not slow to take effect. In a typical shell factory, several thousand women coming under L 2, the basic or time rate rose straight away from 15s. to 23s. a week; while the advances gained on the premium bonus rates amounted at least to 10s. a week, the women rivalling the men

in earnings, notwithstanding a deduction of 25 per cent. from the basis times on account of the need of inexperienced female labour for additional supervision and assistance in setting the tools. But, although the advance in wages was substantial, the circular represented only a compromise. The time rate 'customarily paid for the job' was not secured except to women employed in the place of *fully skilled tradesmen*; and, without a guaranteed time rate, the piece rate remained liable to abuse by an unscrupulous employer. Moreover, a large body of workers coming under L 2, 'gaugers', 'examiners', 'labourers', were time workers, and entitled only to the standard of £1 a week for normal hours, although the rate customarily paid for the job was 28s. or upwards, and female labour proved no shortcoming in output. The bare standard conceded to time workers, while piece workers earned comparatively high wages, caused grave disaffection in more than one factory. Nor was the full rate of £1 a week always secured; and, the normal hours of work being reduced from 53 or 54 to 48 a week, the rate was reduced, in proportion, to 18s.; although a deduction from the rate on account of a reduction in the hours of work was against the practice of the trade, the usual effect being to accelerate and not diminish output. The clause permitting a reduction of 25 per cent. from the rate for women 'prevented from working owing to breakdown, air raids, or other cause beyond their control' unless they are sent home and secure in consequence nothing at all, gave a similar sanction to another departure; the men being paid full time under like circumstance. The rate of £1 a week of normal hours was not even a *minimum* but a *standard* except for piece workers; the term 'minimum', included in the original draft, being struck out from the circular by the Minister of Munitions on the representation of the employers. The absence of provision for young girls under 18 years of age showed as serious a defect. Nor was the omission remedied by the order fixing rates of wages for young girls under 18 years of age employed on work 'not recognized as women's work before the War', issued by the Minister of Munitions, July 1916, and reducing the standard of L 2 by 10 to 30 per cent. according to the age of the worker on the *piece rate* as well as the *time rate*, although juvenile labour proved no shortcoming in output or other disadvantage to the employer.¹

It should also be noted that, although Circulars L 2 and L 3 were enforced practically throughout the engineering industry proper, there were many other forms of munition work to which they were not applied. The struggle to secure their extension to these cases, or some alternative form of wage regulation, therefore continued; and wages far lower than those prescribed in L 2 continued to be paid.

¹ *Women in the Engineering Trades*, by Barbara Drake, 1917, p. 33.

On account of the manifest necessity for further wage regulation on a national scale, the Minister of Munitions, on the 10th March 1916, took action under the powers conferred by Section 8 of the Munitions of War (Amendment) Act of 1916, and set up two Special Arbitration Tribunals to deal, the first with women's wages and conditions, and the second with those of semi-skilled and unskilled men replacing skilled men on munition work. The second of these tribunals had very few cases brought before it; for the Trade Unions were generally strong enough to deal with questions of men's wages by direct negotiation. The first, on the other hand, was very active indeed. It arbitrated, and fixed wages and conditions, in many hundreds of cases in which the employees of single firms were concerned, laying down both rates for women on the less skilled types of work, and special higher rates for women on semi-skilled work, and even sometimes awarding women the rates of the skilled men whose work they had undertaken.¹

Gradually, on the basis of its actual experience in fixing rates for particular cases, the Special Arbitration Tribunal for Women developed a mass of precedents. Working upon these, it drafted, during the years 1916-18, a series of general recommendations, similar to Circular L 2, laying down rates of wages and conditions of employment for women engaged on classes of work falling outside the scope of Circular L 2, or imperfectly covered by it. The revision of Circular L 2 was also undertaken. These general recommendations, as they were completed, were forwarded by the Tribunal to the Ministry of Munitions; for the power to make general Orders governing wages and conditions remained with the Minister, and was not conceded to the Tribunal itself. The Ministry did not in all cases adopt the recommendations as they came from the Tribunal, changes worsening the proposed conditions being sometimes made; but, with these changes, most of the general recommendations made by the Tribunal were

¹ The value of the provision in L 2 under which women on skilled work were awarded the full district rates of wages was largely destroyed by the refusal of the Ministry of Munitions to grant the women the same advances on the pre-war rates as the men. It was held, manifestly against the intention of the original agreement, that women replacing skilled men should receive only the old standard rates, and not the men's war advances, but only those granted on a lower scale, to women workers.

subsequently issued as general Orders, enforceable at least on all controlled establishments. The Minister also acted on the advice of the Special Arbitration Tribunal, subject to the same exception, in awarding to women munition workers advances, on the rate originally fixed, as the cost of living increased. The most far-reaching of the general Orders originally drafted by the Special Arbitration Tribunal was the Order fixing the rates of wages and conditions for women employed on munitions on 'work not recognized as men's work before the War'. This was first issued in July 1916, and was followed, *inter alia*, by general Orders dealing with the wages and conditions of girls under 18 employed on munitions on men's work, of girls under 18 on work other than men's work, of women and girls on woodwork processes for aircraft, of women and girls on other woodwork processes, and so on. Finally, in 1918, the Consolidated Women's Wages Order, replacing and harmonizing all the previous Orders, was issued. The Special Arbitration Tribunal continued throughout to deal with particular cases in which either the application of the Orders was doubtful, or a special rate was claimed for work requiring particular skill, or involving particular danger or unpleasantness.

I have carried the story of the regulation of women's wages on so far in advance of the progress of the general narrative in order to avoid repetition. We must now, however, return to the period at which all this regulation began—the closing months of 1915 and the beginning of 1916. This was a period during which dilution was being rapidly extended to the accompaniment of considerable friction. Up to October 1915, save in isolated cases, the introduction of women had been almost confined to certain very clearly defined branches of munition work, of which the principal were work on shells, fuses, and cartridges. Dilution by the promotion of semi-skilled men to skilled positions and of unskilled men to semi-skilled positions, had been advancing more rapidly; but it had not, in face of the shortage of skilled labour, and the doubtfulness of the line of demarcation between skilled and less skilled workers at many points even before the War, led to many serious disputes, especially as skilled men's wages were usually conceded to less skilled men undertaking skilled work.

From October 1915 onwards the Ministry of Munitions had

made up its mind that dilution must be very greatly hastened and extended. The supply of less skilled men was running out as the demands of the army increased. In this month the 'Derby Scheme' of voluntary attestation, the immediate precursor of conscription, was introduced; and preparations were soon in full swing for the first compulsory Military Service Act, which became law on the 27th January 1916, the same day as the Munitions of War (Amendment) Act. On the 26th October 1915 the Ministry of Munitions began the issue of 'war badges' to men protected from military service on occupational grounds; but it became evident that not further expansion, but actual contraction, of the supply of less skilled men for munition work was inevitable.

In these circumstances the Ministry of Munitions turned its attention more and more to extending the sphere of women's employment. A general Circular had been issued on the 17th August to all controlled establishments by the Ministry, stating that the Minister of Munitions had reason to believe that skilled workmen were being employed in too large a proportion to semi-skilled or unskilled workmen, and that he was convinced that it would be quite impossible to satisfy the urgent and prospective demand for skilled workmen unless their employment were strictly limited to work for which their special skill was indispensable, or which could not be performed in whole or in part by semi-skilled or unskilled labour, either of men or women. This was now followed up by further circulars, dealing more particularly with the need for extending the sphere of women's employment. A considerable storm was aroused, for example, by the following Circular, which proposed the introduction of women into the class of work which had been regarded as the securest monopoly of the skilled tradesmen:

MINISTRY OF MUNITIONS,
Armament Buildings,
Whitehall,

8th October 1915.

Machine Tools Department.

SIRS,

I am directed to state that it is noticed with regret from the returns received, that you are not at present employing female labour in connection with the manufacture of machine tools.

The necessity for employing women upon such work is most urgent, and it should be realized that there is work that can be undertaken by women in *all* establishments engaged upon the manufacture of machine tools.

In employing women, or other unskilled labour, it is necessary that the conditions of Schedule II, paragraph 7, of the Munitions of War Act, 1915, should be observed, that is to say, that an opportunity for local consultation with the workmen or their representatives shall be given in cases where it is desired to introduce changes in working conditions, and the employment of women in connection with work upon which women have not previously been employed should be regarded as a change.

I am, Sir,

Your obedient servant,

F. W. BLACK,

Director-General of Munitions Supply.

In November 1915, in forwarding Circular L 2 and L 6 to all 'controlled establishments', the Ministry made a further appeal for the extension of dilution. In February 1916, after the Munitions of War (Amendment) Act had become law, this appeal was further reinforced by the following Circular (L 29), which thereafter governed the procedure for the extension of dilution :

GENTLEMEN,

I am directed by the Minister of Munitions to refer to previous communications as to the necessity of dilution of skilled labour with unskilled in order to procure a sufficient supply of labour for the production of munitions, and to call attention to the statement on this subject made by the Prime Minister in the House of Commons on January 21st, a copy of which is enclosed.

In accordance with the last paragraph of that statement, I am now to instruct you that the dilution of labour should be pressed forward in your works, in accordance with the procedure indicated herein, as extensively as possible and without delay. This dilution implies that—

(1) The employment of skilled men should be confined to work which cannot be efficiently performed by less skilled labour or by women.

(2) Women should be employed as far as practicable on all classes of work for which they are suitable.

(3) Semi-skilled and unskilled men should be employed on any work which does not necessitate the employment of skilled men and for which women are unsuitable.

In introducing the changes necessary to carry out in your establishment the instructions of the Government, strict regard must be had to the provisions laid down in the Munitions of War Acts as recently amended and in the various Circulars which have been issued by the Ministry of

Munitions as to the manner and the conditions under which these changes should be made. In particular, I am to call your attention to the provisions of Circular L 6 as to the procedure to be adopted, and of the Circulars L 2 and L 3 as to the rates of wages to be paid. If any difficulty is felt as to the interpretation of any provisions of these circulars, or of the Acts, the Ministry will be pleased, on hearing from you, to send a representative to give explanations. For convenience of reference a memorandum, giving the substance of these circulars and of relevant provisions of the Munitions of War Acts, is enclosed herewith.

I am further to suggest that with a view to seeing that the necessary changes are carried out in accordance with the due conditions, you should consult the Chief Labour Officer representing the Ministry of Munitions in your district on your proposed changes before making them. In doing so you should particularly specify any changes affecting Admiralty work, so that the views of the Admiralty thereon may be obtained.

You will have the full support of the Minister in carrying out these directions.

I am to ask you to acknowledge the receipt of this letter and to report to the Minister from time to time the steps taken to give effect to the above directions and any difficulties that you may encounter in carrying them out.

I am,

Gentlemen,

Your obedient Servant,

H. LLEWELLYN SMITH.

Before the issue of this Circular a further important step had been taken to secure an extended application of dilution. On the 23rd January 1916 a Special Dilution Commission of three members was established for the Clyde area, and on the 25th January a similar Commission of three was appointed for the Tyne.¹ On the 12th May 1916 the Tyne Commission was disbanded, and the Clyde Commissioners were given jurisdiction over the Tyne area.

The work of the Dilution Commissioners was carried out between January and September 1916, and produced very important results in extending dilution, the results obtained on the Clyde and Tyne being subsequently applied to a large extent in other areas. From the first the Commissioners worked in close

¹ Clyde Commissioners—Mr. (now Sir) Lynden Macassey, K.C., Sir Thomas Munro, and Mr. Isaac Mitchell.

Tyne Commissioners—Sir George Marks, M.P., the Right Hon. G. N. Barnes, M.P., and Mr. (now Sir) D. J. Shackleton.

conjunction with the District Committees of the Trade Unions mainly concerned. Until the end of May the Clyde Commission was mainly engaged in furthering dilution in the engineering industry ; but in June it turned its attention to the shipyards, and conditions for the application of dilution were agreed upon between it and the Boilermakers' and Shipwrights' Societies. On the Tyne the general scheme for the application of dilution was issued on the 28th January, and accepted by the employees in the huge Elswick works of Messrs. Armstrong, Whitworth, on the 31st January.

Both Commissions proceeded largely by the same methods. They began by getting into touch with the District Committees of the principal Trade Unions, and reaching agreement with them upon the general conditions under which dilution was to be introduced. They then went from works to works, and from department to department, and, after meeting the representatives of the firm and the shop stewards¹ representing the employees wherever they deemed it necessary, they drew up a special works or workshop scheme of dilution, setting out in detail the operations on which dilution was to be introduced, the methods and practices governing their execution before the War, and the nature of the changes contemplated. At the same time the general conditions agreed upon for the district as a whole were modified or expanded in any way necessary to meet the circumstances of the particular factory or workshop in question. As a rule a Shop Committee, consisting of the shop stewards chosen by the workers, or of a selected number of them, was set up to watch the administration of the scheme, and to consult with the firm on any questions arising out of its operation. Consultation was always to precede any extension or modification of the original scheme, and a full record of the changes made was to be supplied both to the Trade Unions and to the Government. A typical set, from the Clyde area, of the general provisions governing the schemes of dilution introduced by the Commission, runs as follows :

¹ For their relations with the shop stewards, see the companion study, *Workshop Organization*, in this series.

PROVISIONS APPLYING TO DILUTION SCHEME IN ALL DEPARTMENTS

- (1) The scheme shall come into operation on the 21st February 1916.
- (2) The scheme is subject to the safeguards provided by Schedule II of the Munitions of War Act, 1915.
- (3) A Shop Committee of the workers is to be formed to confer with the management on any point resulting from the practical operation of this Dilution Scheme which it has not been possible to settle between the individual worker concerned and his foreman. If, after the matter has been brought before the management by the Shop Committee and discussed, a mutual understanding is not arrived at, the matter in dispute shall, without stoppage of work, be referred to arbitration, in accordance with the provisions of the Munitions of War Acts, 1915 and 1916.
- (4) A record of all past and present changes in practice in the departments affected by the scheme shall be deposited at the Labour Exchange, Canal Street, Clydebank, to be retained for future reference by all concerned.
- (5) All skilled and semi-skilled men who were engaged in the engineering trade in the service of the employers immediately prior to the War shall, if affected by the scheme, be granted a certificate to that effect should they desire it.
- (6) No alteration shall take place in this scheme unless due notice is given to the workmen concerned, and the procedure followed as prescribed by Clause 7 of Schedule II of the Munitions of War Act, 1915.

Naturally, not the least difficult part of the task which the Dilution Commissioners had to accomplish was the adjustment of wages necessitated by the introduction of fresh classes of workers. In some cases complaints were made that agreements arrived at with particular bodies of shop stewards for single establishments overrode general district practices or agreements, and some rectifications had to be made in order to get over this difficulty. As a rule, however, the main problem was the fixing of the rates to be paid to women dilutees; for women were by now being introduced in large numbers on the more skilled types of work, and constant disputes were arising as to their right to receive the district rates of wages for skilled workers. Usually, where the Trade Unions contended that the women were doing skilled work, the employers objected to this view, on one or other of two main grounds. Either they maintained that the women were doing, not the whole, but only a part of the operations previously performed by skilled men, and that these operations had been so altered or readjusted as to make the payment

of the skilled men's rate unnecessary ; or, alternatively, they urged that the women were in fact replacing, not skilled men, but apprentices, between whose work and much of that done by fully qualified skilled men it was naturally impossible to draw any clear line of demarcation. On the 14th June 1916, in reply to a large number of demands made by the Amalgamated Society of Engineers and the National Federation of Women Workers for the payment of the skilled men's rates to women workers in the north-western area, the Ministry of Munitions replied that, after a full investigation had been held, ' the investigating officers found *no clear cases* in which a woman was doing the work customarily done by a fully skilled tradesman. In one or two cases, where they appeared to be doing so, the firm was able to show that they had simplified the operation by an adjustment of the machine or that the nature of the work had otherwise been modified. The majority of the questions at issue affect the machine tool trade, and are cases where women and girls are replacing boys, youths, and apprentices of various ages.'

These explanations were naturally not admitted as satisfactory by the Trade Unions ; for manifestly almost any type of work could have been excluded under them from the designation ' skilled men's work '.

The case with which the Clyde Commissioners had most often to deal was that in which women were engaged only on a part of the work previously done by fully skilled men. It was a vexed question, and one liable to hold up the development of dilution, what rates should be paid under these circumstances, and this was one of the first questions with which the Commissioners attempted to deal. On the 7th May, after a great deal of friction had occurred, a provisional agreement, subject to the sanction of the Minister of Munitions, was reached between them and the Executive Council of the Amalgamated Society of Engineers governing the introduction of dilution at Messrs. John Lang & Sons' works at Johnstone, near Glasgow. This agreement was worded as follows, and drew from the Ministry the following reply, which in turn produced a rejoinder from the A.S.E. :

H.M. GOVERNMENT COMMISSION TO EFFECT DILUTION OF LABOUR
(Clyde District).

Central Station Hotel,
Glasgow,

7th May 1916.

*Agreement between the Executive Council of A.S.E.
and*

*Lynden Macassey and Sir Thomas Munro, in reference to the case of
John Lang & Sons, Johnstone.*

In the case of women employed on part only of the work customarily done by fully skilled tradesmen the women shall start and for a period of four weeks remain at £1 per week.

They shall receive £1. 5s. 0d. for the fifth week and then, beginning from the sixth week, rise by weekly advances so as to receive at the end of the thirteenth week from starting the time rates of the tradesmen who customarily do the work.

This arrangement is to be retrospective.

LYNDEN MACASSEY.
THOMAS MUNRO.

Ministry of Munitions of War,
6 Whitehall Gardens, S.W.
23rd May 1916.

SIR,

I am directed by the Minister of Munitions to refer to an arrangement between the Executive Council of the Amalgamated Society of Engineers and Mr. Lynden Macassey, K.C., and Sir Thomas Munro in reference to the case of John Lang & Sons, Johnstone, which is dated May 7th, 1916.

I am to say that the Minister approved and confirms the arrangement on the clear understanding that it applies to the establishment of John Lang & Sons, Johnstone, only, and that only to women employed in that establishment on the following work, that is to say :

- (1) The rough scraping and bedding of slides of lathes.
- (2) Partial operations on lathe aprons.
- (3) Partial operations on gear boxes.

I am to add that the Minister reserves his full power to give directions as to the rate of wages of women employed in circumstances analogous to those of women to whom the arrangement as hereby confirmed applies, or to refer to the Special Arbitration Tribunal constituted under section 8 of the Munitions of War (Amendment) Act, 1916, for advice on any question as to what directions are to be given.

Ministry of Munitions.

25th May 1916.

DEAR SIR,

I have to acknowledge receipt of your letter of the 23rd inst. with reference to the agreement entered into between my E.C. and Mr. Lynden Macassey, K.C. and Sir Thomas Munro in reference to the case of John Lang & Sons, Johnstone, dated May 7th, 1916.

In reply I am directed to call the attention of your department to the fact that the agreement mentioned above did not specify any particular operations, but was general in character, covering the case of women employed on part only of the work customarily done by fully skilled tradesmen at the firm of Messrs. John Lang & Sons, Ltd.

Under these circumstances my E.C. will be pleased to have the Ministry's approval and confirmation of the agreement as entered into between the above-mentioned parties.

Yours faithfully,

p.p. ROBERT YOUNG.

Gen. Sec.

The dispute revealed in this correspondence remained unsettled throughout the whole of the year 1916, cases being settled as they arose by direct negotiation or by awards of the Special Arbitration Tribunal. In a few cases besides that of Messrs. John Lang, and notably in the Tyne area, the recommendations of the Clyde Dilution Commission were accepted, and women were paid in accordance with the Lang agreement. But, in the great majority of instances, either the simple £1 a week under Circular L 2 was secured, or a rate but very little higher. At length, in February 1917, the Ministry of Munitions, acting partly on the advice of the Special Arbitration Tribunal, issued an amended version of Circular L 2 under the name 'Order 49'. The following provisions were there laid down to govern the cases of women employed on 'part or portion' of the work previously done by skilled men :

(a) (i) Women employed on the work customarily done by fully skilled tradesmen shall in all cases be paid, as from commencement, the time rates of the tradesmen whose work they undertake.

(b) (ii) A woman shall be considered as not employed on the work customarily done by a fully skilled tradesman, but a part or portion only thereof, if she does not do the customary setting up, or when there is no setting up, if she requires skilled supervision to a degree beyond that customarily required by fully skilled tradesmen undertaking the work in question.

(b) (iii) Women who undertake part or portion only of the work customarily done by fully skilled tradesmen shall serve a probationary period

of three months. The wages of such women for this period shall be reckoned as follows: They shall be rated for a period of four weeks at the time rate of wages to which they are entitled under these directions when employed on time, and from that rate shall then rise from the beginning of the fifth week until the end of the thirteenth week by equal weekly increases to the district time rate of the fully skilled tradesman, and shall thereafter be rated at the district rate of the tradesman whose work they are in part or portion undertaking.

(b) (iv) In any case where it is established to the satisfaction of the Minister that additional cost is being incurred by extra setting up or skilled supervision due to the employment of women in place of fully skilled tradesmen, the rates payable to women under these directions may, with the sanction of the Minister, be subject, for so long as such additional cost is incurred, to deductions not exceeding 10 per cent. to meet such additional cost: Provided that no women shall in any case be paid at lower rates than those prescribed by paragraph 1 (a) of these directions.

In the same amending order provision was definitely made for rates higher than the L 2 minima to be paid to women employed on semi-skilled or specially laborious work.

(a) (ii) Women employed on time, (a) on work of a class customarily done by semi-skilled men, or (b) on work of a specially laborious or responsible nature, or (c) where special circumstances exist, shall be paid according to the nature of the work and the ability of the women, but in no case less than the time rates specified in paragraph 1 (a) (i).

During the year 1916 the Ministry of Munitions greatly extended its organization; and its officials in all parts of the country, furnished with a regular service of information concerning the new experiments in dilution and substitution which were taking place, sought to apply in all centres the results of the detailed work of the Clyde and Tyne Commissions. Dilution, therefore, advanced very rapidly indeed, and was applied to every branch of munitions production in which it was at all practicable. It was not, at this stage, applied compulsorily to any form of engineering work other than munitions, and it will be remembered¹ that explicit pledges had been given by the Government that it would be confined entirely to the manufacture of munitions of war. The dispute which arose, in October 1916, out of the Government's desire to depart from this undertaking, and to apply dilution to 'commercial and private work' as well as to munitions, is described in a later chapter of this study.²

¹ See *ante*, p. 74.

² See Chapter IX, pp. 142-151.

CHAPTER VII

THE MUNITIONS ACTS, 1915-16.

THE passing of the Munitions of War Act in July 1915 has already been described,¹ and reference has been made to the serious discontent which developed in the autumn of that year in consequence of actual experience of its working and of the methods of administration adopted under it. The causes of this discontent, so far as they related directly to the dilution of labour, have been dealt with already ; but it is now necessary to deal with the remaining grievances, so far as they affect the subject of this study, and the consequences to which they led in the amendment of the Act and changes in the method of administering it. From the first, one of the most serious groups of grievances arose out of the working of Section 7, which inaugurated the ' Leaving Certificate ' system. The text of this section has been quoted above.²

Gross abuses immediately developed out of this provision of the Act. Six weeks' idleness was out of the question for the vast mass of workers, and accordingly the section at once operated so as to prevent workers from changing their employment when they saw a chance of improving their position. Even if another employer was willing to pay a further higher rate of wages, or to employ them on more skilled and responsible work, they could not leave their jobs without a waiting period of six weeks. They could, of course, appeal to the Munition Tribunals established under the Act ; but, during the early period especially, the Tribunals were very loth to grant certificates, and even the fact that undoubtedly ' sweated ' rates of wages were being paid was often not regarded as a sufficient reason for the granting of a certificate. Frequently the Tribunals refused to take into account at all the rates of wages paid, and even, as long as the worker was on any kind of munition work, the class of work on which he or she was employed. This is shown, not only by

¹ See Chapter IV.

² See p. 81.

an examination of the records of Tribunal cases reported in the Press and the Trade Union journals, but also by the nature of the circular which, at a later stage, the Ministry of Munitions was compelled to issue to employers concerning the conditions under which they should grant certificates. In one case, which created widespread unrest, a big firm engaged on munitions even developed the custom of at the same time discharging employees when there was a temporary slackening of work, and refusing them certificates in order that they might have to return when the pressure of work was renewed. This meant, of course, that during the period of slackness the workers concerned were absolutely precluded from earning wages at all. Tribunals also often refused to grant certificates even when intolerably long hours, up to 70 and 80 a week in some cases, were being worked ; for this was the period before the economy of shorter hours had been discovered, largely as the result of the investigations made by the Health of Munition Workers' Committee, which was established on the 17th September 1915, and began to produce an effect on the methods adopted during the first half of 1916.

The grievances concerning 'Leaving Certificates' affected skilled and unskilled workers, men and women, alike. They were greatly aggravated by the fact that, although there were 'workers' assessors' on the Munition Tribunals, these were chosen from obsolete panels constituted under the Insurance Act of 1911, and were often not bona fide Labour representatives. Consequently, all sections of workers joined in the demand for the reorganization or abolition of the 'Leaving Certificate' system, and for the revision of the panels of assessors if the system itself was retained.

Another constant cause of trouble arose out of the powers conferred on the Tribunals to fine, and even in certain cases to imprison, workers for breach of workshop rules or for other offences under the Munitions Act. During this period fines were constantly imposed for breaches of working rules arbitrarily imposed by the employer, and wholly distinct from any general rules sanctioned by the Minister of Munitions. The Trade Unions demanded that the penalty of imprisonment under the Act should be abolished, and that fines should be levied only for

breaches of rules actually approved and generally prescribed by the Minister of Munitions. The right to appeal to a higher Court from decisions of the Munition Tribunals, which were often conflicting, was also demanded. On the 16th and 17th September 1915 the Trade Unions met the Government and placed before Mr. Lloyd George their complaints and demands for redress.

In October 1915 the general unrest came to a head, and, on the 9th October, at the summoning of the Amalgamated Society of Engineers, the Trade Unions principally concerned met in conference at York and decided to take steps to secure redress. This led to the appointment by the Government, later in the month, of a special Commission, consisting of Lord Balfour of Burleigh and Mr. (now Sir) Lynden Macassey to inquire into the causes of the prevalent unrest, especially as they affected the Clyde area. The report of this Commission, which was issued on the 17th December, has been summarized as follows :

The need for a Court of Appeal from the decisions of the Tribunals was recognized in the Report, which urged that there should be standardisation of decisions over the whole country. On the question of the leaving certificate and dismissal of workmen, the Commissioners strongly upheld the Labour view. They urged that an employer should be compelled to grant a clearance certificate immediately upon dismissal (except in cases of misconduct) or to pay compensation to the dismissed employee for his inability to secure employment ; that an employer who refused a certificate should be compelled to state in writing the grounds for such refusal ; and that the one-sided state of the law under which an employer could at any time dismiss a worker, though the latter could not of his own initiative leave his work, should be remedied. Five other reforms were suggested in the matter of leaving certificates. Employers should be prohibited from stating on the certificate the reason for dismissal ; and certificates were to be granted in four cases where their refusal had been causing considerable injustice—in cases where skilled men who were temporarily working as labourers now wished to return to skilled work they were to be allowed to do so ; men who were working so far from their homes that they were compelled to keep up two establishments were to be released if their Union could find a substitute ; a certificate was to be granted to men not receiving the district rate of wages ; and, finally, a workman was to be released from any class of work if certified unfit for that work by the competent medical referee.

The recommendations also included the abolition of imprisonment for non-payment of fines ; and a clear distinction between rules enforceable

under the Act and rules posted by a private employer on his own responsibility. The Commissioners also stated that much unrest was caused by the refusal or failure of employers to explain to their workmen the ground for their action in many cases, and also by disputes about piece prices, which could without difficulty be avoided if more reasonable methods were adopted. To settle the latter difficulty it was suggested that works rules should be framed to provide for the prompt determination of such questions as they arose.¹

Meanwhile, further steps had been taken by the Trade Unions. A further Trade Union Conference on the position was held on the 22nd October, and on the 23rd November the National Labour Advisory Committee,² appointed after the Treasury Conference, called a full meeting of the Trade Unions affected to consider the position. This meeting was adjourned until the 30th November, when a Committee was appointed to negotiate with the Government concerning the amendment of the Act. The Government, on its side, also desired to amend other provisions of the Act in order to extend its own powers, and from November 1915 to January 1916 there was a stiff struggle between the Trade Unions and the Government as to the form which the new measure should take.

The Government Bill, in its original form, entirely failed either to meet the demands of the Trade Unions or to carry out the recommendations of the special Commission appointed in October. The Amalgamated Society of Engineers, which took the leading part in the struggle, then drew up a series of amendments which, it proposed, should be inserted in the Bill. The most important of these, which are contained in full in a pamphlet 'Amending the Munitions of War Act, 1915', issued by the Society, were embodied in a letter which the Executive Council of the A.S.E. issued to all members of the House of Commons in December, when the Government Bill was before Parliament. This letter was worded as follows :

To the Members of the House of Commons.

MUNITIONS OF WAR (AMENDMENT) BILL.

SIR,—We are instructed by the Executive Council of the Amalgamated Society of Engineers to invite the serious attention of the Members of

¹ Quoted from *Labour Year Book 1919*, p. 97.

² See *ante*, p. 74.

the House of Commons to the Munitions Act (Amendment) Bill, which will be considered in Committee to-day (Friday, 17th) and following days.

To many of the provisions of this Bill the Amalgamated Society of Engineers (which has 205,000 members, spread over nearly all constituencies) very strongly objects. The proposed alterations in the law were submitted by the Government to a conference representing 55 Trade Unions of Munition Workers; and various amendments were carried by that conference.

With regard to some of these amendments, it was intimated on behalf of the Government that they would be accepted and incorporated in the Bill. This has not been done. Other amendments agreed to by the Trade Union Conference were to be considered. These have equally not been incorporated in the Bill.

We are, on behalf of the Executive Council of the Amalgamated Society of Engineers, to say with how much concern the Council views this action of the Minister of Munitions. They have consistently endeavoured, in view of the national crisis, to induce all the members of the Society to do their utmost to help the supply of munitions at this stage of national crisis.

On the Clyde and on the Tyne, in particular, and also in other important industrial centres, grave dissatisfaction and serious danger of disturbance exist. The Executive Council cannot but feel that industrial harmony will be gravely jeopardised by what will seem to be a disregard of the admitted grievances of the workers.

Some, even, of the recommendations of Lord Balfour of Burleigh and Mr. Macassey with regard to the Clyde workers are ignored in the Bill (see Cd. 8186, issued 14th December).

The Amalgamated Society of Engineers is not here concerned with any demand for higher wages. What is asked for is merely an alteration in some of the clauses in the Munitions Act which have been found to cause injustice to individual workpeople, and to create that ill-feeling which is so prejudicial to the utmost possible output.

The points on which the Amalgamated Society of Engineers lay stress are the following:

Arbitration: The definite fixing of a term of 21 days within which a settlement shall be assured.

Local Committees: The establishment of Local Joint Committees—already promised in principle, but omitted from the Bill—to adjust local differences at the outset, before they become serious.

Munition Tribunals: The Assessors to be members of the Tribunals, with voting power.

Leaving Certificates: To be given in first instance by the Local Committees, subject to appeal.

Rules and Regulations: Where these infringe conditions of employment already agreed to, they should not come in force until there has been

local consultation between employers and workmen. (This is guaranteed in Clause 7 of Schedule II of Act.)

Publication : In Board of Trade Labour Gazette, all rules and regulations. This was definitely promised by the Government but is omitted from the Bill.

Minister's Directions as to Minimum Rates of Pay, etc. (Memorandum L 2) : Power is given in the Bill to enforce these as regards women only. It was agreed by the Government to take power also with regard to semi-skilled and unskilled men. This is omitted from the Bill.

Imprisonment : A pledge was given that there should be no liability to imprisonment under the Munitions Act (only for Munition Tribunals of the second class). Lord Balfour of Burleigh and Mr. Macassey expressly recommended that there shall be no liability to imprisonment. Not only is this not carried out in the Bill, but Clause 11 actually enlarges the possibility of imprisonment.

We are instructed to enclose a statement of the amendments asked for by the Amalgamated Society of Engineers, and passed by the Trade Union Conference on Tuesday, November 30th, together with short reasons for amendment.

THE EXECUTIVE COUNCIL OF THE
AMALGAMATED SOCIETY OF ENGINEERS.

This letter followed upon a serious misunderstanding. The Trade Union Committee appointed on the 30th November met Mr. Lloyd George, and placed its proposals before him. Mr. Lloyd George promised full consideration, and left the Committee under the impression that their main claims had been conceded. Slight amendments,¹ ignoring most of the claims, which included the demands in respect of dilution dealt with in the preceding chapter, were then introduced into the Bill, and Mr. Lloyd George appealed to the House of Commons to pass it rapidly as a 'non-contentious' measure. It was in reply to this plea that the A.S.E. Council addressed its circular letter to the Members of Parliament. The result was that, after the committee stage of the Bill had been rushed through in readiness for its passage before Christmas, the Prime Minister (Mr. Asquith) intervened, and ordered the postponement of the remaining stages until the New Year.

The Amalgamated Society of Engineers immediately took advantage of this breathing space, and summoned a National Conference to meet on the 30th December, for the purpose of

¹ For a summary of these amendments, see the *Labour Year Book, 1919*, p. 100.

considering the whole question of dilution in relation to the Bill. A Committee appointed by the Conference asked for and obtained an interview with the Prime Minister and Mr. Lloyd George on the following day. At this meeting an agreement was reached, described by the A.S.E., in its official report, in the following terms :

AGREEMENT BETWEEN THE GOVERNMENT
AND
THE AMALGAMATED SOCIETY OF ENGINEERS.

In consideration of the pledges given by the Prime Minister and the Minister of Munitions, the Committee agreed, on behalf of the conference and membership of the Society, actively to co-operate in the scheme for ' dilution '.

The following statement of the agreement arrived at rests on the Government shorthand writer's report of the Conference interview, and in order to prevent the possibility of future misunderstanding, we think it desirable to put on record the following summary and explanatory notes of the terms of the agreement for the guidance of our members.

1. The conditions set forth in the two memoranda of the Minister of Munitions, known as L 2 and L 3, to be the conditions for the employment of unskilled and semi-skilled workmen on work heretofore done by a class of workmen of higher skill and of women on munition work of a class which prior to the War was not recognized as women's work in districts where such work was customarily carried on.

2. Joint Committees to be set up in every district in which engineering work is carried on, and on these joint committees the workmen's half of the membership is to represent only Trade Unions engaged in the engineering industry, and these, so far as practicable, in proportion to their membership in the locality so engaged. These joint committees to deal with such matters as may be referred to them by any of the parties concerned, and, in particular, to have the function of considering all questions of discharge certificates before any application with regard to them is entertained by a Munition Tribunal, and to have power to settle such questions, subject to appeal to the Tribunal.

3. To avoid arbitration delays, questions referred under Section 2 of the Munitions Act to be settled by the arbitrators within 21 days.

4. The Munition Tribunals to be re-constituted and re-formed in procedure, as follows :

(a) The panels from which the workmen's assessor is chosen are to be re-constituted in such a way as to make them representative of engineering workmen.

(b) The Chairman is required in every case to consult his assessors before announcing the decision of the tribunal.

(c) When the assessors agree their decision is always to be adopted as the decision of the tribunal.

(d) An appeal is allowed to a Court of Appeal on issues of mixed law and fact, as well as on points of law.

5. No workshop rules to be enforced other than those definitely agreed to by the workmen concerned, or those identical with the model rules issued by the Minister of Munitions.

6. The changes taking place in any workshop in connection with 'dilution' or otherwise to be recorded in pursuance of paragraph 6 of the Second Schedule of the Munitions Act, and copies of such records to be supplied to and kept by the Ministry of Munitions and the Trade Unions concerned.

7. The Minister of Munitions is to confer with the President of the Board of Trade, with whom the question is to be raised as to how best to secure the position of the men working on munitions in railway shops, who are by order made subject to Section 7 of the Munitions Acts as to discharge certificates and proper conditions of employment in view of the fact that they are prevented from leaving, are subjected to 'dilution', and yet are not secured the terms laid down in Memoranda L 2 and L 3.

8. The liability to imprisonment in consequence of a sentence of any Munition Tribunal to be abolished.

9. Publicity to be given in the Board of Trade Labour Gazette to Rules, Regulations, Orders, etc., under the Munitions Act.

Finally, your Council feel it right to add that the Prime Minister appealed in the most impressive terms for a loyal and whole-hearted carrying out and enforcement of this agreement in every case, and the Minister of Munitions concurred.

Of the points mentioned in the above summary, only some were included in the Bill. The Union's terms in respect to dilution were conceded, as described in the last chapter; the penalty of imprisonment was abolished; the Munition Tribunals were reorganized, and the wide powers of appeal demanded by the Unions granted; arbitration was speeded up; and assurances were given that the post-war position of the Unions should not be prejudiced by the introduction of 'non-union' labour. The main outstanding difficulty was that of the proposed local Committees (Point 2 in the above agreement). These were not set up, and the failure to establish them was felt as a serious grievance for a long time afterwards.

The actual proposals of the A.S.E. on this point, and the reasons officially given in support of them, were as follows :

(a) In all munition areas, local joint committees, equally representative of employers and employed, shall be established.

(b) The employers' side of each local committee shall be elected by the employers in the district, and the workers' side by the Trade Unions or Trade Union branches in the district.

(c) The local committee shall meet at least once a fortnight, and within two days of a demand from either side a special meeting shall be held.

(d) The local committee shall report to the Minister of Munitions (Central Labour Supply Committee) all cases in which either side considers that the rules concerning limitation of profits in controlled establishments under the Munitions of War Act are being evaded, or that Government work is being put aside in favour of private work, or in any other manner unreasonably hindered.

(e) No matter within the jurisdiction of a local Munition Tribunal shall be brought before a Munition Tribunal, general or local, until it has been referred to the local committee for settlement, and the local committee has failed to secure a settlement, always providing that this provision shall not apply to differences arising under Part I of the Act.

(f) The local committees shall enforce in all munition establishments the payment of the Trade Union district rate of wages for each class of work.

Any person failing to conform to the decision of a local committee under this section shall be guilty of an offence under the principal Act as amended by this Act.

(g) Subject to the provisions of Schedule III, all proposals to abrogate or vary any Trade Union regulation or workshop custom, or to import new classes of labour, or to utilize semi-skilled or female labour on automatic or semi-automatic processes shall be brought before the local committee, and shall come into operation only with the sanction of the local committee or the Minister of Munitions (Central Labour Supply Committee) if the local committee fails to agree.

Any person acting contrary to the provisions of this section or of Schedule III¹ shall be guilty of an offence under this Act.

Reasons for Amending Section XV.

(a) The Government, by the creation of the Central Labour Supply Committee, has recognized the need for securing the co-operation of employers and employed in the organization of munition work. It is, however, useless to expect that this co-operation will bear fruit unless it is made local as well as national. What is needed is close co-operation between the employers and the workmen in each munition centre. This can be secured only by means of local joint committees equally representing both parties. Such local co-operation would be far more effective

¹ i. e. Circular L 6.

than the attempt to organize all munition work under the central authority of the Ministry of Munitions.

(b) The War has been the cause of considerable changes in the organization of industry. Many of these changes profoundly affect the position of workers, and there can be no guarantee that they will work smoothly unless the workers are allowed a share in administering them. This should be the chief work of the local committee which should be entrusted with the task of adapting industry to the new needs and of directing its conduct under the new conditions.

(c) Committees chosen by the Minister of Munitions do not command the same confidence as committees directly elected by those whom they are to represent.

(d) It is commonly believed that firms supposed to be on Government work are still putting such work aside in favour of private work, and the limitation of profits and other provisions of the Act are being evaded. If the local committees have power to draw the attention of the Minister of Munitions to such cases much would be done to remove the present discontent.

(e) It is impossible for a central authority to enforce in every establishment fair wages and conditions. This can be done only through local bodies with full knowledge of the facts.

(f) Local knowledge and local Trade Union confidence are no less necessary in deciding that on all questions relating to Trade Union rules and workshop customs.¹ This can be secured only by giving the Trade Unions a recognized position and status in dealing with such questions.

(g) The Act provides for a schedule of departures from Trade Union or workshop rules made since it came into operation. It is necessary to provide further for a schedule of similar departures made during the earlier period of the War. Such a schedule can be made adequately only by local bodies with full knowledge of the facts, and only such bodies will be able to enforce the restoration of pre-war conditions when the War is over.

The origin of these proposals is to be found, of course, to a large extent in the experiments, already described, in munitions organization on a representative basis, which were inaugurated by the establishment of the North-East Coast Armaments Committee on the 9th April 1915. Ever since the supersession of the Armaments Committees in July and August 1915 an agitation had been in progress for their revival; and this cry had gained support on the basis of the growing demand, independent of war conditions, for 'workers' control' in industry and the replacement of capitalist organization by a system of 'indus-

¹ There is clearly something wrong with this sentence. I quote it as it stands in the original.

trial democracy'. Moreover, both Mr. Lloyd George and other Government spokesmen had, from the first, made appeals which sounded extraordinarily democratic and equalitarian to the Trade Unions for their co-operation in the increase of munitions output, their advice and assistance in carrying through dilution, and so on; and these appeals seemed to justify, and were, for a few months, held to justify the Trade Unions in expecting that a share in the control of the industry would be accorded to them. Mr. Lloyd George had spoken of the Treasury Agreement as 'the great charter for Labour', and as 'opening up a great new chapter in the history of Labour in its relations with the State'; and many persons had been unwise enough to take Mr. Lloyd George literally.

At the interview of the 31st December 1915, as can be seen from the document quoted above, the Trade Unionists were fully of opinion that Mr. Asquith and Mr. Lloyd George had granted their terms. When, however, the A.S.E. pressed for the establishment of Local Joint Munition Committees in accordance with its interpretation of the agreement, the Prime Minister replied, on the 3rd February, in a letter questioning the accuracy of the Report issued by the Society. A meeting between the A.S.E. and the Ministry of Munitions followed on the 10th March; but here again the same difference of interpretation arose, and nothing was done to establish the Joint Committees which had been proposed. Reference to the full shorthand notes of the Conference of the 31st December shows how this difficulty arose. It is clear that the Engineers' delegates were left, and were meant to be left, with the impression that the proposed Joint Committees were to be set up; but no quite positively committal phrase was used either by Mr. Asquith or by Mr. Lloyd George. The Unions, therefore, succeeded in amending the Munitions Act so as to remedy some of their more urgent grievances; but they did not succeed in altering at all the main current of Government policy, or its essentially bureaucratic tendency.

The amendments made in the Munitions Act by no means put an end to industrial troubles. Considerable improvements began indeed to be made from this time in the wages paid to

the majority of women workers ; but other causes of grievance continued rapidly to accumulate. Reference has been made already to the visits paid by Mr. Lloyd George to the Clyde and Tyne areas at Christmas 1915. Out of these, serious trouble soon arose. On the 3rd January, *Forward*, the leading Glasgow Labour paper, was suppressed after it had published a full, though unofficial, account of Mr. Lloyd George's meeting. On the 3rd February two Labour newspapers, both published in Glasgow, the *Worker* and the *Socialist*, were also suppressed ; and on the 6th and 7th February a series of arrests took place of unofficial Clyde leaders, who were subsequently sentenced to periods of imprisonment. *Forward* was only allowed to reappear on giving an undertaking 'not to issue or publish any matter calculated to prejudice the military interests or safety of the country in the present crisis, or to impede or interfere with the production or supply of munitions of war, or cause disaffection with the Munitions of War Acts or with the policy of the dilution of labour', and to submit any doubtful matter to the Press Bureau before publication.

These prosecutions caused further unrest, and on the 17th March the position on the Clyde was greatly worsened by the outbreak of a strike at the Parkhead Works of Messrs. Beardmore. This dispute, which subsequently extended to other establishments, arose out of the obstacles placed by the firm in the way of action by the shop stewards to organize the women who had been introduced on munition work, and the repudiation of the unwritten agreement under which the chief shop steward had been permitted to go freely from department to department for the purpose of dealing with grievances as they arose.¹

This dispute, which appears to have been in fact the result of a purely economic grievance, was widely represented as a sinister anti-war plot. It was stated by Dr. Addison in the House of Commons and by other speakers that the shops in which the stoppage had occurred had been deliberately held up because they were engaged on the production of a type of howitzer then urgently needed at the front. That this was

¹ For a fuller account of the Parkhead dispute, see the companion study of *Workshop Organization* in this series. See also the Labour Party Report on the dispute.

not the case was, however, subsequently admitted. The fact was that a type of gun which was being finished at Parkhead was passing through its earlier stages of production at a neighbouring works. When the Parkhead strike occurred, the employees of the other firm were asked to do the finishing work. They refused and struck in protest, on the ground that it would be 'blacklegging' to do the work of men on strike. The supposed 'plot' had thus a perfectly accidental origin.

The effect, however, of the allegations was to stir up intense feelings on both sides; and the Government decided to take drastic action for the suppression of the dispute, a considerable extension of which was threatened. Accordingly, on the 25th March and the following days, a considerable number of the most prominent 'left-wing' leaders on the Clyde were arrested without charge or warrant, and deported from Glasgow without any form of trial. The movements of these 'deportees' were controlled by the military authorities: they were removed arbitrarily to other parts of Scotland, and were compelled to report to the police at the places to which they were banished. They were forbidden to return to their homes; and it was only after considerable agitation that the Government was induced to pay allowances to the dependents whom they had left behind without means of support.

Gradually, with or without conditions, most of the deportees found work in other towns. A few signed an undertaking 'to refrain from taking part in strikes for the period of the War', and were allowed to return to the Clyde. Others held out for unconditional return, which was not granted until the 30th May 1917, more than a year after the deportations.

During this period of unrest, many signs of which were seen in other parts of the country as well as on the Clyde, the system of compulsory military service had been introduced into Great Britain. The first Military Service Act, applying conscription to single men, was passed on the 27th January 1916—the day on which the Munitions of War (Amendment) Act also received the Royal Assent—and came actually into operation on the 2nd March. The coming of military compulsion naturally exercised a profound influence on the position in the workshops and on

the progress of dilution. Hitherto it had been both generally assumed and repeatedly stated by Mr. Lloyd George and other Government spokesmen that the sole purpose of dilution was to increase the supply of munitions to the utmost possible limit. But, from the time when compulsory military service was introduced, it was inevitable that another motive should also operate, and that dilution should be applied, not only for the increasing of production, but also for the purpose of releasing more and more industrial workers for service with the army. With this development, and with its effects upon our problem, we must deal in the following chapter.

CHAPTER VIII

DILUTION AND MILITARY SERVICE

CONSCRIPTION was introduced into Great Britain by a series of stages, and probably could not have been introduced, at least without a serious upheaval, in any other way. The National Registration Act, passed on the 14th July 1915, and the 'Derby Recruiting Scheme', launched in October, paved the way. Under the latter it was understood that the retention of the voluntary system would depend on the response made to the appeal for 'attestation'. The Trades Union Congress in September 1915 declared overwhelmingly against conscription; but the Labour bodies actively helped voluntary recruiting, both before and under the Derby scheme. Despite the protests of a specially summoned and fully representative Labour Conference, which again pronounced against conscription on the 6th January 1916, the first Military Service Act, applying compulsion to single men, became law on the 27th January. It was rapidly followed by the second Military Service Act, extending conscription to married men, which became law on the 25th May 1916.

The industrial reactions of the military demands of the nation were first clearly felt with the coming of the 'Derby Scheme'. In October 1915 the Ministry of Munitions began the practice, which was subsequently discontinued, of issuing war badges to men who were regarded as engaged on vital national work. Under the 'Derby Scheme', munition workers were asked to attest; but the calling-up of men who were required for work at home was prevented by a double procedure. Lists of 'starred' and 'reserved' occupations were drawn up, and men working in these were not liable to be called up. Tribunals were also established, to which men who attested, but had a reason for holding that they should not be called up, could appeal.

With the passage of the first Military Service Act this procedure was placed on a more formal basis. Lists of special occupations were issued from time to time by the Reserved

Occupations Committee, which subsequently became a part of the Ministry of National Service. These lists might provide for the total exemption of workers belonging to a particular occupation; but they more often exempted men only after a certain age, or only if they were married. Military Service Tribunals were also definitely established under the Act; but the great mass of industrial exemptions were granted, not by Tribunals, but under the special arrangements made by the departments. Cases in which men came under the schedules of certified occupations had, however, to come before the Tribunals, except where some special procedure had been devised for a particular class of persons, such as munition workers or miners.

In September 1916 a body called the Man-Power Distribution Board, under the chairmanship of Mr. Austen Chamberlain, was appointed with the following terms of reference :

To determine all questions arising between Government Departments relating to the allocation or economic utilization of man-power for the purpose of the successful prosecution of the War, and in order to give effect to its determination to direct the Government Departments concerned to create the machinery necessary to co-ordinate their activities in regard to the distribution or utilization of men and women.

The Man-Power Board was dissolved in January 1917, on the creation of the National Service Department; but, before it ceased to exist, it played its part, in the autumn of 1916, in a very important crisis affecting the munitions industries.

These industries were, at first, comparatively little affected by the coming of conscription. The problem of increasing the supply of munitions was still, during most of 1916, at least as urgent as that of securing men for the army; and, in the early days of the Military Service Acts, most munition workers found 'war badges' and other forms of exemption comparatively easy to come by. The flow of less skilled men from other occupations into the munitions industries was, indeed, largely stopped; but it was some months after the passing of the Act before even the less skilled men who were actually working on munitions were taken for the army in considerable numbers.

Thereafter, events moved rapidly. As we have seen, dilution was being very greatly extended during these months, with so

great an effect on output that the problem of munitions supply was ceasing to give any serious anxiety. In the summer of 1916 very large numbers of the less skilled men employed on munition work began to be taken for the army, and 'de-badging' and 'de-certification' proceeded apace.

For a while longer the skilled munition worker, unless he himself desired to join the army, usually retained his protection from military service; for, despite the advance of dilution, there was still a shortage of skilled workers. Countless disputes arose over the question whether this or that particular workman could, or could not be regarded as skilled. Employers, anxious to retain their men, often classed as 'skilled' workers to whom they were paying unskilled rates of wages. The Trade Unions thereupon would demand for such men, often with success, the full skilled district rates. In other cases the military authorities would claim a man whom the Trade Unions regarded as skilled. In these cases negotiations would follow, and the claim, sometimes of the Unions, and sometimes of the recruiting authorities, would be upheld. As dilution extended the conditions of exemption were steadily tightened up; and, on the 22nd July, the skilled workers' Trade Unions, alarmed at the outlook for their members, sent a deputation to the Government to protest against the taking of skilled men for the army. Through the rest of the summer and autumn the bickering continued, each Union being largely engaged in preventing the enlistment of its members, and the War Office, which resented the protection accorded to munition workers, losing no opportunity of getting men for the army, even if this involved the use of, to say the least, disingenuous methods. 'All's fair in war and recruiting' became the maxim on which both parties acted. Friction steadily increased; and, on the 9th November 1916, the wrongful enlistment of a Sheffield engineer named Hargreaves led to a local strike, which threatened to spread to many other important munition centres.

This brought matters to a head. The strike, which lasted until the 17th November, compelled the Amalgamated Society of Engineers, which was mainly involved, to take action on a national scale. Accordingly a National Conference of the

Society was called ; and, as a result of this Conference, the A.S.E. and the Government, which was mainly represented by the Man-Power Distribution Board, entered into a national agreement on the question of the recruiting of members of the Society for the army.

This agreement, known as the 'Trade Card Scheme', handed over the issuing of exemption certificates to its members to the Amalgamated Society of Engineers itself. To all their skilled members (defined as 'those who had been journeymen or apprentices before August 1915'), the A.S.E. was entitled to issue a card of exemption. If a man's right to hold this card was challenged, the matter was to be settled by one representative of the War Office, of the Ministry of Munitions, and of the Trade Union.

The fact that this agreement was concluded is a sufficient sign that the Government did not, at this stage, desire to enlist skilled munition workers in the army, except for those corps which were actually engaged on skilled engineering and kindred work. The A.S.E. furnished the Ministry of Munitions and the War Office with lists containing many thousands of names of men whom it alleged to have been wrongfully enlisted, and urged that as long as these men were kept on unskilled work in the army there could be no case for taking further men even for the skilled artificer corps. The Government finally undertook to endeavour to get skilled men then serving in the ordinary regiments transferred to special corps or to skilled work—an attempt which broke down in face of the determined resistance of the actual regimental and staff officers, who refused to discover any skilled workers who might be serving under them. It was further agreed that, in future, the Ministry of Munitions should undertake the supply of skilled men for the army, and that men should be asked to enrol voluntarily. Skilled workers who were not working full time on munitions were also to be called upon under the agreement to enrol as War Munition Volunteers.¹ The agreement ended with the following very significant provision :

If skilled men for the army are not secured in this way it is clearly understood that recourse must again be had to the statutory powers.

¹ See *ante*, p. 80.

The Trade Card Agreement of November 1916, was, at first, an agreement purely between the Government and the Amalgamated Society of Engineers. The smaller Trade Unions of skilled workers, whose members were suffering under the same grievances as those of the A.S.E., speedily demanded, however, its extension to themselves, and this claim, put forward at a Conference of the Engineering and Shipbuilding Trades on the 2nd December, was at once granted by the Government, so far as the Unions of skilled workers were concerned. The general labour Unions, whose members were mainly among the less skilled workers in the munitions industries, at once put forward the same demand on their own behalf, claiming, with a good deal of truth, that there was no absolutely clear line of demarcation between their membership and that of the craft Unions, especially among the grades of workers who were usually classified as 'skilled' but not as 'fully skilled'. If the craft Unions alone were allowed to issue trade cards, injustice would be done, according to the general labour Unions, to those of their members who, if they had belonged to craft Unions, would have been entitled to trade cards by reason of their skill and occupation. To this the A.S.E. replied that skilled workers had no business to be enrolled in the general labour Unions, as they ought to belong to the appropriate Union organizing their craft.

The Government refused to allow the general labour Unions to become parties to the Trade Card Scheme, which would clearly have been very difficult to apply to their case without serious abuses. This refusal caused the general labour Unions, with some show of justice, to maintain an agitation against the scheme; and this agitation served the Government in good stead a few months later, when it was for the first time desired to enrol considerable numbers even of skilled workers in the army.

In December 1916 a 'Director-General of National Service' was appointed in the person of Mr. Neville Chamberlain, and a National Service Department was created by Act of Parliament. To this new Department the duties of the Man-Power Distribution Board were transferred in the following month. Under the new Department an elaborate scheme of 'War Work

Volunteers' was inaugurated, with the object of speeding-up the processes of dilution and substitution. In April 1917 trade committees of employers and workers were formed to advise the Department as to the numbers to be taken from each industry for military service, and as to the methods to be adopted. A monthly total of men required for the army was fixed, and releases of the fixed numbers from industry had to be carried through, the vacant places being taken by substitutes not eligible or not fit for military service. Restrictions were also imposed on the engagement of any fresh male labour, except in the essential war industries, under the Restricted Occupations Order of March 1917; but this and some of the other provisions of the new scheme worked so badly that they had to be withdrawn.

At the beginning of April 1917, in connexion with the new arrangements for the organization of National Service which were then being carried through, the Government abruptly announced its repudiation of the Trade Card Agreement, the reason given being that the necessary numbers of men for skilled work in the army were not being obtained on a voluntary basis. The Trade Unions contended that this was because the Government refused to find and use for skilled work the thousands of skilled men already in the army. But the Government had made up its mind that considerable further enlistment of skilled men was essential for general service as well as for artificer units, and that the Trade Card Scheme, which was clearly not compatible with this new plan, must be swept away. On the 3rd April, accordingly, the Trade Card Scheme ceased to exist, and was replaced by the 'Schedule of Protected Occupations' (M.M. 130), which swept away all previous forms of exemption from military service, and made all future exemptions wholly conditional on the will of the National Service Department. From this time until the end of the War the cry of the army for men became ever more insistent. In April 1917, not only the munition trades, but also the miners, the railwaymen, and other classes of essential workers were called up to release large numbers of men for the army. For a time, serious trouble seemed to threaten; but the Unions accepted the position,

and throughout the remainder of the year the release of skilled men took place even more rapidly. At the beginning of 1918 the demand for men was further increased, and a revised Schedule of Protected Occupations (M.M. 130—revised) removed the exemption of further large classes of skilled workers. Two further Military Service Acts, which greatly increased the stringency of conscription, were passed in 1918.¹

From April 1917 onwards, skilled men were thus being removed from industry in considerable numbers. Throughout this period the demand of the skilled workers was that, before any skilled men were taken for the army, all 'dilutees' of military age and fitness should first be removed. It was pointed out that, when dilution was first introduced, definite undertakings had been given that its purpose was solely the increase of munitions production, and not the release of skilled men for military service. As long as the output of munitions failed to keep pace with the demand, the Government had no reason for departing from this promise; and it was accordingly kept, apart from particular cases of over-zeal on the part of the recruiting authorities. But the position was not the same in industries other than those concerned with the supply of munitions; and elsewhere, from September 1916 onwards, the method known as 'substitution', which was in fact largely identical with dilution, was increasingly employed.

Under the 'substitution schemes' of September 1916,² special Committees were formed locally to arrange for the replacement of workers in essential industries who were fit for military service by workers who were unfit or over age, or by women. Numerous agreements regulating 'substitution' were entered into from this time onwards between Trade Unions and employers' associations in a wide variety of industries.

In the early stages this process of 'substitution' did not affect the skilled munition workers, though it was largely applied to the releasing of 'dilutees' who were fit for military service. It was evident, however, that, as military needs expanded, it would be impossible to prevent the application of 'substitution',

¹ See later, pp. 135-140.

² For a fuller account of 'substitution', see Chapter XI.

by whatever name it might be called, to the skilled branches of munition work. This was what actually occurred after the abolition of the Trade Card Scheme in April 1917. Certain classes of skilled workers maintained, to the very end of the War, their immunity from military service; but this was a narrowing group, and more and more the method of 'substitution' was applied to the less indispensable even of the skilled workers in the munitions industries.

Thus, during the later part of the War, both skilled workers and the male 'dilutees' who had been introduced or 'up-graded' at an earlier period were being taken for military service. This naturally led to the fullest possible employment of women's labour; for although many wounded soldiers unfit for further active service, and many men who had been medically rejected, were sent into the munition works, the supply of less skilled male labour became more and more inadequate. The craft Unions, indeed, failed to secure that, before skilled men were taken for military service, all male 'dilutees' of military age and fitness should be removed; but they did secure that this should be the rule applied in the majority of cases. The less skilled workers sent into the munition shops under the substitution scheme were classified as 'Army Reserve Munition Workers', a class quite distinct from the 'War Munition Volunteers',¹ who were in all cases skilled men. These A.R.M.W's. had to sign a special form (A.R.M.W.—k.), agreeing:

To undertake work for war purposes in the employment of any firm of employers which may be named under the Ministry of Munitions, and to remain in such employment during the War for as long as is required by the Ministry. . . . I understand that I am liable to return to military service at any time that I cease to be employed at any firm named by the Ministry of Munitions, or if I am ordered to report myself for service with the Colours by the Competent Military Authority.

The relative scarcity of less skilled male labour had, as we shall see later, a considerable effect on the course, and on the lasting results of war-time dilution. Had an abundant supply of such workers been available, it is certain that the employment

¹ See *ante*, pp. 80 and 132.

of women would have increased far less; for the Ministry of Munitions often found employers, largely on grounds of prejudice,¹ very unwilling to experiment with women's labour, despite the low wages which it was often possible to pay. There was, on the other hand, no reluctance, but rather a considerable eagerness to 'dilute' skilled male labour with that of less skilled men—a process involving far less trouble and adjustment of factory plant and conditions.

If dilution had taken to the end the course which seemed most likely in 1915 and 1916, its permanent results would probably have been very different. Women's labour, save in exceptional cases, would have been used only for certain simple classes of operations largely arising only in connexion with war-time production, and there would thus have been little likelihood of any widespread retention of it, save on certain special types of work, after the War. The labour of less skilled men, on the other hand, would have been used to dilute a far wider variety of skilled operations; and these operations would have been largely of kinds which are required for peace-time as well as for war-time production. The craft monopolies of the skilled workers would thus have been far more effectively invaded; and the probability is that the restoration of pre-war Trade Union conditions would have proved to be impossible, and that the craftsmen's position would have been permanently undermined in many branches of skilled work, though not, of course, in those which demand the highest types of skill.

Any such development was, however, prevented by the growth of direct military demands, which resulted in the removal of most of the fit and eligible members of the less skilled male grades of labour for military service. The substitutes, provided as A.R.M.W's., were not only inadequate in numbers, but also, as a rule, of a far less capacity for the higher forms of dilution than those whom they replaced. Accordingly, processes and machinery had more and more to be adapted for the fullest utilization of women's labour, working under skilled supervision. This led to the creation, in a considerable degree, of a 'single-

¹ And also because of the special provisions for mess-rooms, 'welfare work,' &c., which were required by the Ministry where women were employed.

purpose' organization suited to the production of munitions but to nothing else. When the War ended, much of this organization had to be scrapped as useless, and a return to pre-war conditions was thus in many respects far easier than many outside observers of the growth of dilution and of women's employment had led the public to suppose.

When the Trade Card Scheme was abolished in April 1917 it was replaced, as we have seen, by the 'Schedule of Protected Occupations' (M.M. 130). This was drawn up, as the Trade Card Scheme had been, under an agreement between the Government and the Amalgamated Society of Engineers, and this agreement, too, was at once extended to the other Trade Unions representing skilled workers. One of the terms of the agreement was that, in every possible case, before skilled men were taken for the army, 'dilutees' of military age and fitness should be removed. This term of the agreement was partially, but not completely fulfilled during the remainder of the year, leading to many isolated disputes. By the end of the year the great mass of the available male 'dilutees' had been removed; and the military authorities, still in quest of more and more men for the army, turned to the skilled workers as an additional source of supply. In September 1917 Sir Auckland Geddes had been transferred from the War Office to be Director-General of National Service; and on the 1st November military recruiting was transferred from the War Office to the National Service Department, which thereafter acquired a greatly enlarged authority. The Department was reorganized during the last two months of 1917; and, at the beginning of 1918, a great new demand for men was put forward.

On the 3rd January the 'Man-Power' Conference, at which the Government placed before the Trade Unions its proposals for further extensive recruiting of men engaged in the vital industries, opened, and on the 5th January Mr. Lloyd George addressed the delegates on 'War Aims'. On the previous day the Amalgamated Society of Engineers withdrew its delegates from the Conference, claiming that, as the terms on which its members could be recruited were governed by an agreement between the Society and the Government, these terms could

be varied only by a variation of the agreement by mutual consent. The Miners' Federation also preferred to negotiate separately with the Government. A few days later Sir Auckland Geddes introduced into Parliament a new Military Service Bill, designed to confer upon his Department sweeping powers for the cancelling of exemptions of all sorts granted on occupational grounds. These proposals at once created a storm. The remaining Trade Unions continued their negotiations with the Government, and further Conferences were held on the 18th January. A National Shop Stewards' Conference condemned the proposals, and called for resistance to them. The Amalgamated Society of Engineers called a full Delegate Meeting, which met on the 22nd January and reaffirmed the claim that the Government must negotiate with it directly before the agreement of April 1917 could be varied. It was also demanded that the Government Bill should be held up until agreement had been reached.

The Government, however, persisted. Sir Auckland Geddes and Mr. Lloyd George refused to meet the A.S.E. The 'Man-Power' Bill was rushed through Parliament, and became law on the 6th February 1918; and, even in advance of this, the National Service Department issued, on the 1st February, a revised 'Schedule of Protected Occupations' (M.M. 130 Revised), under which many certificates of exemption were removed. The A.S.E. Delegate Meeting thereupon balloted the members of the Society on the question of accepting or rejecting the Government's proposals, and the result, announced on the 20th February, was their rejection by an overwhelming majority. The miners called a National Conference on the 31st January, and referred the question to the district Miners' Associations, which in most cases put forward the demand that before regular miners were taken all 'dilutees' should be removed from the mines.

The Government had secured its legal authority to proceed; but it was evident that to do this without a further attempt to secure agreement would be likely to lead to a big industrial upheaval. A meeting between the A.S.E. and the other Trade Unions involved led to no result; and, on the 28th February, the Government was compelled to depart from its earlier determination, and to meet the A.S.E. delegates in separate conference

for the discussion of the proposal to abrogate the agreement of April 1917. The negotiations, thus resumed, went on during March, and further meetings were held by the Government both with the A.S.E. and with the miners. In consequence of these meetings, both bodies agreed again to consult their members. The miners' ballot, of which the result was announced on the 20th March, showed a small majority against acceptance; but the Executive of the Miners' Federation, in view of the sharp division of opinion, decided to accept the Government's proposals. On the 21st March an unofficial A.S.E. Conference, held at Manchester, threatened a national strike against the 'comb-out'; but the official leaders of the A.S.E. issued a strong manifesto against any stoppage of work, and a second unofficial conference on the 22nd March practically cancelled the strike threat by deciding to postpone action.

The principal reason for this sudden change of attitude was the great German offensive of March 1918, which created a state of feeling such as to make a stoppage impossible. The effect was seen in the A.S.E. second ballot, the result of which, announced on the 11th April, was a startling reversal of the previous vote, and an acceptance of the Government demands. Under stress of the offensive, moreover, a further and far more drastic Military Service Bill was introduced into Parliament on the 9th April and became law on the 18th April. A Royal Proclamation, cancelling large classes of exemption certificates, was published on the 20th April.

This was the last of the great man-power crises of the war period. A minor crisis occurred in June, when, on the 8th June, the Government announced a big extension of the War Munition Volunteer Scheme. All workers eligible for enrolment were to enrol on threat of the withdrawal of their protection certificates. If this had been accepted, it would at once have converted the 'volunteers' scheme into a form of compulsory service, to which, for industrial work, the Trade Unions had throughout the war period offered successful opposition. On the 1st July the National Labour Advisory Committee issued a statement disclaiming all responsibility for the extension of the scheme; and, in view of the strong opposition which had been aroused, and the magnitude of

the powers which it already possessed, the Government withdrew the attempt to make the scheme compulsory.

In September 1918 the recruiting arrangements were further tightened, and a revised 'List of Certified Occupations', under which further exemptions were withdrawn, was issued on the 26th September. This, however, did not greatly affect the vital industries, and led to no crisis. Recruiting then proceeded quietly, without further changes in the arrangements governing it, until the signing of the Armistice on the 11th November 1918.

CHAPTER IX

THE MUNITIONS ACTS, 1916-18

ON the 9th July 1916 Mr. E. S. Montagu became Minister of Munitions, and on the 19th August Mr. Arthur Henderson left the Board of Education in order to take up the new post of 'Labour Adviser' to the Government. In October the Ministry of Munitions came forward with a demand, founded upon the 'Substitution Scheme' of September 1916,¹ which was then beginning to be widely applied to other industries, that dilution should be extended to commercial and private work, whereas, under the pledges given by the Government when it was originally introduced, it was confined to munition work alone, and could not be applied to other work carried on in engineering and kindred establishments.

On the 27th October 1916 a conference of Trade Union representatives met, at the invitation of the Government, to consider the proposal that dilution should be extended to private and commercial work. The Amalgamated Society of Engineers, however, refused to attend either this or the subsequent conferences called to deal with the question.

The conference between the Government and the remaining Trade Unions was resumed on the 22nd November, when Mr. Montagu, for the Ministry of Munitions, and Mr. Austen Chamberlain, for the Man-Power Distribution Board, addressed the delegates on the closely related questions of dilution on commercial work and the taking of skilled men for the army. The following resolution, which had been adjourned from the meeting on the 27th October, was before the delegates :

This conference of Trade Unions, representative of the chief Unions in the shipbuilding and engineering industries, having considered the recommendation of the Man-Power Distribution Board that the practice of dilution should be extended to firms engaged wholly or partially on private and commercial work, accepts, and agrees to recommend to their members,

¹ See p. 178.

the principle that dilution shall be extended to private and commercial work in the engineering and shipbuilding trades, provided—

1. That the employers on their side agree to be bound by :

(a) Terms at least as favourable to the workpeople as the Treasury Agreement of 17th March (equivalent to the Second Schedule to the Munitions of War Act) ;

(b) The terms of any Orders, including L 2 and L 3, made by the Minister of Munitions as to the remuneration or employment of women and girls on work customarily done by men, or of semi-skilled men on work customarily done by skilled men.

2. That in order to ensure that the skill and energy of every man be used in the best and fullest manner, a guarantee be given that skilled men set free from private and commercial work as a result of dilution shall not be taken for general military service so long as they are required either for munition work or for technical units of the army, in which their special skill will be best utilized.

3. That men of military age, who are fit for general military service, are not introduced in place of men displaced under this scheme.

4. That in the absence of legislation, the Man-Power Distribution Board make arrangements that the terms of all agreements entered into in accordance with the above scheme shall be duly registered with a Government Department, with a view to the restitution of Trade Union conditions after the War, in accordance with the terms of the Munitions Acts.

5. That in order to carry out a general scheme of dilution throughout the industry, a system of local committees, on which Labour is adequately represented, should be instituted.

In the course of the discussion the Government promised to extend to the other skilled workers' Unions the Trade Card Agreement, which it had arrived at in the interval with the Amalgamated Society of Engineers. In consideration of this and other undertakings, the Conference voted, by 37 votes to 23, in favour of accepting the principle of dilution on private and commercial work. On the following day, the 23rd November, Mr. Montagu wrote to the Unions, noting with satisfaction their acceptance of the proposal.

This, however, was very far from settling the question ; for the A.S.E. refused to accept the extension of dilution, and, whatever the other Unions might say, it was practically bound to remain inoperative as long as the A.S.E. opposed it. This was, in fact, recognized by the Government and by the other Unions ; and, after a further Conference of the Trade Unions (still without the A.S.E.) had decided to consult its members

further concerning the acceptance of the proposed extension of dilution, the plan was for the moment allowed to hang fire.

This was the position when, on the 7th December 1916, Mr. Lloyd George displaced Mr. Asquith as Prime Minister, Mr. Henderson entering the War Cabinet as the representative of the Labour Party, and Dr. Addison succeeding Mr. Montagu as Minister of Munitions. These changes involved considerable re-arrangements, and nothing further was heard for some time of the proposed extension of dilution. In March 1917, however, the project was revived ; and, on the 29th March, Dr. Addison introduced into the House of Commons a Bill to amend the Munitions of War Acts of 1915 and 1916. The most important clause of this measure was one which would have enabled the Ministry of Munitions compulsorily to apply dilution to work other than munition work. This clause was worded as follows :

1. Where the Minister of Munitions is satisfied that it is of national importance that all or any of the provisions of the Munitions of War Acts, 1915 and 1916, should be extended to work of any particular class or classes, or to all or to any work in any particular establishment or class of establishment, he may issue a certificate to that effect and may by order direct that those provisions shall be extended accordingly ; and thereupon those Acts or the provisions thereof set forth in the order shall have effect as though references to munition work included references to the work specified in the order :

Provided that it shall not be lawful by any such order to extend to any establishment or class of establishments the provisions of the Munitions of War Act, 1915, relating to the suspension of rules, practices, and customs tending to restrict production or employment unless the provisions of that Act relating to the limitation of profits, or any other provisions which may hereafter be substituted therefor, and the provisions of that Act relating to undertakings to carry out the provisions of the Second Schedule to that Act are also so extended.

This provision of the new Bill was met with the same hostility as the previous proposals. A widespread agitation against it arose among the engineers in all parts of the country, aggravated by the man-power crisis which arose in April, when, as we have already related,¹ the Government abruptly cancelled the Trade Card Agreement concluded in the previous November. The

¹ See *ante*, p. 139.

threatened strikes in connection with the Trade Card Scheme were averted by the conclusion of an agreement between the Amalgamated Society of Engineers and the Government; ¹ but a great deal of ill feeling remained. On the 3rd May 1917 the first strike arising out of the new dilution proposals took place. Without waiting for the passage of the Munitions Bill, which was still before Parliament, a Lancashire engineering firm, Messrs. Tweedale and Smalley, of Castleton, near Rochdale, decided to introduce dilution on private work. Without any consultation—for the firm refused to recognize Trade Unionism—they called upon their skilled men to instruct and supervise women who were taken on for work previously done by skilled workers. The skilled workers refused, and were discharged. When this had been repeated with a second batch of men, the three hundred skilled employees of the firm struck work. The military authorities thereupon improved the occasion by calling up some of them for the army. A big extension of the dispute was only averted, after considerable delay, by the fining of the firm under the Munitions Acts and the resignation of Mr. Tweedale, who had been mainly responsible for the trouble.

This dispute had not been finally disposed of when, on the 10th May 1917, by far the most serious strikes of the war period broke out in the munitions industries. These cessations of work, generally known as the 'May strikes', were unofficial, and the recognized Trade Union leaders had no part in them. They were not, indeed, directed at all from any one centre. What occurred was that, in one district after another, the skilled engineers, and with them many of the less skilled workers, ceased work, the strike fever passing rapidly from place to place. The grievances, and still more the emphasis laid upon them, differed from district to district. In many areas, and especially in Lancashire and the textile engineering districts, the principal grievance was the attempt to apply dilution to commercial work: in other areas grievances concerning military service were paramount; while the administration of the Munitions Acts, the rise of prices, bad housing in the crowded munition centres, and many other causes, also entered into the dispute.

¹ See *ante*, p. 140.

The strikes did not continue for long. Eight leaders of the rank and file were arrested and charged under the Defence of the Realm Acts, and warrants were issued for the arrest of others. But, within a fortnight of the beginning of the strikes, there was a general return to work, after an undertaking had been given that all outstanding grievances would be dealt with by negotiation between the Government and the official Trade Union representatives. To this the unofficial leaders, who had assembled in conference in London, also agreed, alarmed by the threat of further prosecutions, and the arrested leaders were released on accepting the agreement which had already been reached by the rest of the 'rank and file' representatives.

There can be no doubt that the 'May strikes' seriously alarmed the Government. Negotiations were at once begun with the A.S.E. and the other Trade Unions affected, and, on the 12th June, the Government appointed a body of 'Commissioners on Industrial Unrest' under the direction of Mr. G. N. Barnes. These Commissioners divided into eight Area Commissions, each of which drew up a separate Report on the Causes of Industrial Unrest, on the basis of a special investigation conducted within its allotted area. These Reports were subsequently collated and summarized in a General Report, issued over the signature of Mr. Barnes. They were of very unequal value; but at least two, those of the South Wales and North-Western Commissions, are documents of very great importance for the study of war time industrial conditions.

In consequence of the dangerous situation the Amalgamated Society of Engineers summoned a full Delegate Meeting, which met in London early in June. On the 13th June Dr. Addison addressed the delegates, who thereupon agreed to take a ballot of the whole of the members of the Society on the question of accepting or rejecting dilution on private work. The Ministry of Munitions did its best by leaflets, placards, press communications, and spoken propaganda, to influence the ballot, its line of argument being that which is set forth in the following leaflet, which was widely distributed in the engineering centres :

MUNITIONS OF WAR BILL.

CASE FOR DILUTION ON PRIVATE WORK.

The Need for Highly Skilled Men.

Highly skilled men are urgently needed for important classes of munition work, such as tanks, aircraft, and guns for use in the present offensive on the Western Front. If these arms are not forthcoming, the number of casualties will be very seriously increased.

The only source from which these men can now be taken is the private trade of the country. Private trade has already contributed large numbers of skilled men, and when further men are removed from it dislocation must follow and industries must be permanently crippled unless everything possible is done to replace the men.

Dilution to Save Trade.

Dilution is the only means by which private industries can be maintained in such a state that they can recover after the War and compete against foreign trade. During the War foreign countries have been organizing to capture industries from this country, and unless dilution is introduced to carry private trades over the war period, there is danger of serious loss of trade after the War.

It is therefore proposed that dilution should be introduced on private work, in order that the skill and energy of every man should be used in the best and fullest manner, and the industrial production of the country should be maintained at the highest possible point. It is intended that the fullest possible use should be made of female labour, in order that the trade may be saved after the War for the men who return from munition work or from the army.

Dilution for War Period only.

Under the Munitions of War Bill, which gives power to the Minister to introduce dilution on private work, the provisions of the Munitions Acts which safeguard the interests of Labour, and guarantee the restoration of trade rules and customs after the War, must be applied whenever dilution is introduced under the powers contained in the Bill. It is thus clear that dilution can be enforced only during the war period, while it is necessary to protect private trades from extinction, and after that period trade conditions must be restored by law.

It cannot be said that dilution of private work is for the profit of employers, since whenever dilution is introduced under the powers contained in the Bill, the provisions of the Munitions Acts relating to the limitation of profits must also be applied.

Employment after the War.

It has been rightly claimed that the men who return from the army and from munition work are entitled to special consideration as regards

employment after the War. It is, therefore, a national duty to these men to maintain the private industries of the country in such a state that good employment will be available after the War. It would be a betrayal of the men who have left their trades for war purposes, if those trades were allowed to die out because women could not be employed to keep the trade going during the war period.

Agricultural Machinery.

The agricultural machinery industry is an example of a trade on which dilution in private work is needed. This machinery is urgently needed to increase the national food supply. Under the new Bill it would be possible to carry out dilution by declaring this to be munition work, in which case the output could be increased by dilution and the safeguards and guarantees to the interests of labour could be applied. It must be agreed that no action should be neglected which could have the effect of helping the national food supply in the present crisis.

Conclusion.

In conclusion, dilution on private work is proposed as a means of carrying on the private industries of the country during the war period, so as to save the jobs after the War of men who have left their trade for war purposes. The Bill will not give profits to employers since profits will be restricted, and it will not affect the interests of Labour since those interests will be fully protected by law. It is, therefore, a duty which the whole trade, both employers and workpeople, owe to the men who have gone to the army or munition work, that trade should be kept going by dilution, until the men can return to their former employment.

While the engineers were voting on the proposal that dilution should be extended, the Munitions of War Bill, which had already been before Parliament since March, was suspended. Moreover, in the hope of getting his main point conceded, the Minister of Munitions made very big concessions, at a Conference on the Bill, which was held on the 18th June. The following account of the more important of these concessions is taken from the statement issued by the Amalgamated Society of Engineers, and accompanying the ballot paper. It will be seen that advantage was taken of the situation to secure the redress of many of the most serious grievances arising out of dilution and the Munitions Acts, and to press for the remedies, such as the establishment of 'Local Committees', which had been desired by the Trade Unions from the very beginning of the War.

I.—Dilution on Private Work.

(a) The further stages of the Bill are suspended pending the result of a ballot vote of our members on the question of accepting dilution on private work.

(b) The right to strike on private work ¹ is maintained even where such work is brought under the Munitions Acts.

(c) Dilution is only to be introduced on private work after the issue of a certificate by the Minister of Munitions giving 21 days' notice of introduction. During these 21 days the Trade Unions can make representations and raise any point with the Ministry; which must take their representations into account.

(d) When dilution is introduced in private work, the workers displaced are to have the right to the conditions granted to war munition volunteers.

(e) Many of the safeguards given below affect private as well as war work.

II.—Suspension of Trade Union Customs.

(a) An absolute guarantee has been included in the Bill that the suspension of Trade Union customs will cease at the conclusion of the War.

(b) Circular L 6, which provides that when dilution is introduced consultation must take place with the workers concerned, and if they so desire with the Trade Union representatives, is made legally enforceable on all employers who introduce dilution, whether on war work or on private work.

III.—Restoration after the War.

(a) A clause has been inserted in the Bill which secures that in all cases the right to strike will be restored at the conclusion of the War.

(b) Compulsory arbitration has been limited absolutely to the war period.

(c) Definite provision has been made for the prosecution of all employers who fail to restore Trade Union customs at the conclusion of the War.

(d) The penalties against employers who fail to restore Trade Union customs have been strengthened, so that an employer can be fined £5 for every workman in respect of whom the failure takes place for every day during which the offence continues.

(e) The guarantees of priority of employment to men serving in the army or displaced by dilution have been strengthened and made more definite.

IV.—Leaving Certificates.

The leaving certificate is definitely abolished, and the sections of the Munitions Acts dealing with it are to be repealed. In order, however, to

¹ 'is', i. e. 'is to be'. The whole document is drawn up as if the agreement had already become law. In fact, many of its clauses never did pass into law, as we shall see later.

prevent men from leaving munitions for private work without good reason, and to prevent employers from poaching one another's men, a new section has been drafted. This provides (1) that an employer not engaged on munition work may not take on a man who has been on munitions without the consent of the Ministry of Munitions; and (2) that when an employer takes on a man who has been on munitions he may not pay him at a rate higher than he is paying other men for similar work. This does not apply where the man has already been receiving a higher rate, in which case he can go to fresh employment at that rate, nor to a man who possesses special ability who is put on to a higher class of work.

V.—Wage Advances.

Clause 3 of the Bill enables the wage advances given by the Committee on Production or by other arbitrators under the Munitions Acts to be extended to non-federated and non-controlled firms, and enforced on such firms. This clause has been improved so as to make it of more general application.

VI.—Arbitration.

A clause has been inserted in the Bill which secures that differences referred to arbitration will be dealt with promptly and the awards issued, in normal cases, within ten days of the reference.

VII.—Payment by Results.

(a) A guarantee has been secured from the Ministry of Munitions not to press the demand for a general adoption of payment by results in all trades and districts.

(b) A new statutory direction will be made under the Bill which secures that, where payment by results has been adopted, collective bargaining shall apply on bonus as well as on piece-work systems, and that prices shall in no case be modified so as to cause a reduction in earnings.

VIII.—Victimization.

A clause has been inserted in the Bill which makes it an offence for an employer to victimize a man for membership of a Trade Union or for taking part in a trade dispute.

IX.—Local Committees.

The Ministry of Munitions have expressed their willingness to establish Local Committees in the munition areas if a workable scheme can be devised, and the Executive Council are submitting a scheme which they think should go far to meet our members' demands. The function of the Committees would be to deal with matters arising out of dilution and similar war cases, and not to usurp the functions of the District Committees, which would continue to deal with trade questions as now.

. . . The Society has hitherto unstintingly supported the Government

in the prosecution of the War, and the result of the ballot will inevitably be taken as the measure of our willingness to continue that support as ungrudgingly to the end.

On behalf of the Executive Council,

J. T. BROWNLIE, Chairman.

ROBERT YOUNG, General Secretary.

The concessions in this list which deal with the restoration of pre-war conditions are dealt with in a later section of this study.¹

The policy of conciliation represented by this draft agreement, however, was not destined to take effect. The result of the A.S.E. ballot, despite the concessions proposed, was the decisive rejection of the proposal that dilution on private work should be accepted. A crisis then occurred in the Ministry of Munitions itself. The A.S.E. vote, and the Reports of the Commissions on Industrial Unrest, both of which were made public in July, served to discredit the Ministry in the eyes of the public; and a demand for drastic reorganization arose. Accordingly, on the 17th July, Dr. Addison was succeeded as Minister of Munitions by Mr. Winston Churchill, who at once set about the reorganization of the Department.

Mr. Churchill's first action was a wise one. At the end of July the proposal to introduce dilution on commercial work was definitely and publicly dropped. Early in August the Munitions Bill was withdrawn and re-fashioned. The clause enabling dilution to be extended was withdrawn; but, in compensation, Mr. Churchill cut out of the Bill most of the concessions which Dr. Addison had promised in June. There were, however, certain parts of the June proposals which, in face of the unrest revealed by the 'May strikes', it was manifestly necessary to retain. Thus, while 'leaving certificates' were not actually abolished, the Minister took power to abolish them, and gave what was practically a pledge to do so without delay. Certain smaller grievances were also remedied; but the main part of the Bill, in its altered form, dealt with the wages question, and therefore falls within the scope of the next chapter of this study.

In dropping all the clauses of the Munitions Bill which dealt

¹ See Chapter XII.

with the restoration of Trade Union conditions, Mr. Churchill gave what was understood to be a pledge that a further amending Bill would be introduced in the autumn session. In consideration of this undertaking, which was not carried out, the Labour Party, which had put down a long series of amendments carrying out the agreement arrived at with Dr. Addison, withdrew these, and allowed the Bill in its truncated form to become an Act on the 21st August 1917.¹

While this measure was passing through Parliament, Mr. Churchill was engaged upon an administrative re-organization of the Ministry of Munitions. This included the establishment of a Munitions Council, based largely on the model of the Army Council, and of a Trade Union Advisory Committee, composed of three panels representing respectively the skilled engineers, the skilled shipbuilders, and the less skilled or general workers. A dispute as to the representation to be accorded to women workers on the last of these panels led to the addition of a separate Women's Trade Union Advisory Committee, representing both the National Federation of Women Workers and the mixed general labour Unions, in November 1917.

Before this, Mr. Churchill had availed himself of the powers conferred by the recent Act, and had issued an Order definitely abolishing 'leaving certificates' from the 15th October 1917. This, however, did not mean that all restrictions on the mobility of labour were removed; for a new Order was issued at the same time under the Defence of the Realm Acts which prevented any worker employed on munition work from shifting to work of another class. Moreover, Regulation 8 B under the Defence of the Realm Acts, originally made in April 1915, remained in force; and this made it an offence for any employer either to invite workers engaged on munitions to leave their jobs even if he was willing to offer more responsible or better paid work, or to endeavour to attract any class of workers from a distance, except through the Employment Exchanges. The operative part of the new regulation issued to replace the 'leaving certificate' provisions of the Munitions Acts runs as follows:

¹ For the provisions of the various Munitions Acts, see the digest contained in Appendix B.

It shall not be lawful for a person without the consent of the Minister of Munitions to give employment to a workman who has, since the passing of this Act, been employed—

- (a) On or in connection with munition work of a class specified in paragraph (a) of Subsection (1) of Section 9 of the Munitions of War (Amendment) Act, 1916; or
- (b) On or in connection with munition work of any other class which may be specified in an order of the Minister of Munitions, where the work on which he is to be employed is not work on or in connection with munition work.

Thus, the munition worker acquired freedom to shift from one job to another, as long as he remained on munition work; but even this freedom was to some extent conditioned by the terms of Regulation 8 B.

The following seven months can be passed over very briefly. The new arrangements for the remuneration of skilled workers made in October, when the 12½ per cent. bonus was granted, are dealt with in the next chapter. In November 1917 a serious dispute arose at Coventry in connexion with allegations that shop stewards were being victimized and refused recognition by employers in that area. The firms in question received the backing of the Engineering Employers' Federation. A strike broke out on the 26th November; but the men returned to work when the Trade Unions took the matter up, and a National Conference was arranged with a view to the conclusion of a national agreement providing for the recognition of shop stewards. On the 20th December 1917 some of the Unions signed an agreement with the Engineering Employers' Federation; but the Amalgamated Society of Engineers, and a few other Societies, refused to accept the terms offered; and a final settlement was not reached until after the end of the War. To all intents and purposes, however, the dispute was settled; for, although the A.S.E. signed no agreement with the employers, *de facto* recognition of A.S.E. stewards was secured, and no further serious trouble arose on this account.¹

The early months of 1918 were largely occupied with the dispute on the 'man-power' question, which has been described

¹ For a fuller treatment of the 'shop steward' question, see the companion study *Workshop Organization*, in this series.

already.¹ It was not until June and July that any further serious trouble occurred in the industries with which the Ministry of Munitions was concerned. During these months the Ministry adopted fresh measures restricting the free engagement of labour, and thereby sought to re-impose some of the restrictions which had been withdrawn when the 'leaving certificate' was abolished. The following letter was addressed to a number of firms, apparently in all to about one hundred, which the Ministry considered to be engaging or employing more than the requisite proportion of the available skilled men, whose numbers had by this time been greatly reduced by the demands of military service :

Ministry of Munitions of War,
6 Whitehall Gardens,
London, S.W.

July 1st, 1918.

GENTLEMEN,

I am directed by the Minister of Munitions to enclose herewith for your information a copy of Regulation 8a of the Defence of the Realm Regulations, 1914, under which you will perceive that the Minister has power among other things to regulate or restrict the carrying out of any work in any factory, workshop, or other premises, or the engagement or employment of any workman or workmen or all classes of workmen therein with a view to maintaining or increasing the production of munitions in other factories, workshops, or premises. You will readily appreciate that the imperative call for more men to meet the needs of the army, taken in conjunction with the serious shortage of labour that already exists, renders it vital that the utmost possible use should be made, in the national interest, of all available labour in the country.

I am to state that the Minister, in exercise of the power vested in him, and with a view to increasing the production of munitions in other factories, workshops, or premises where skilled labour is urgently required, has decided to issue, and hereby issues, the following directions, regulations, and restrictions in respect of your Establishment, viz. :

(1) *On and after the receipt hereof*, you shall not engage for employment in your Establishment, without the licence of the Minister, *any skilled man* of any of the types set out in the schedule at the back hereof.

(2) If you desire to obtain a licence for the engagement or employment of any skilled man or men, of any of the types specified in the schedule, you shall apply in writing to the *Chief Dilution Officer, Minister of Munitions, 111 New Street, Birmingham*,² for such licence, and should give full particulars of the work for which the man or men is or are needed and such other information as the Ministry may require.

¹ See pp. 137-141.

² Or other appropriate regional address.

(3) The expression 'skilled men' in Clauses (1) and (2) includes any skilled man or any of the types specified in the schedule at the back hereof, who receives the full district rate for the work on which he is employed.

(4) You are hereby required to comply with any directions given by any representative of the Ministry of Munitions with a view to the carrying out of this order and in particular to produce to him your register of labour and /or form 82 S, or any modification thereof, and to complete the same forthwith in case any of them is incomplete, and to give to him all such information as he may require and in such form as he may require as to the persons in your employment, and to make such returns and keep such records from time to time as he may require as to such persons.

(5) Nothing herein stated shall affect the existing powers of the Minister to assign or transfer any man or men.

(6) Clause (1) of this order shall not apply to the re-engagement of existing employees where there has been no break in the employment, and to the engagement of discharged soldiers and sailors.

I am to state that, in connection with this matter, a Representative of the Ministry will visit your Establishment very shortly, and I am to ask that you will have your Register of Labour ready for his inspection, and that you will afford him all other facilities for ascertaining the number of skilled men of the types mentioned in the schedule, who are employed by you, and the use that is being made by you of their services.

I am, Gentlemen,

Your obedient Servant,

(Signed) T. M. TAYLOR.

Schedule above referred to.

Skilled men of all types.

In addition to this action officially taken by the Ministry of Munitions, many employers were about this time entering into mutual agreements not to engage men who had been employed by any of the firms entering into the agreement, unless the firm which the man had left was willing that he should be so engaged. The effect of such agreements, where they were in operation, was, of course, to impose far more drastic restrictions on mobility than the 'leaving certificate' had involved; for against this secretly imposed ban of the employer there could be no appeal to a Munitions Tribunal.

The combined effect of these official and unofficial measures was to create, in many centres and especially in the Midlands, a serious condition of unrest; and, on the 23rd July 1918, a general unofficial strike against the 'embargoes' took place

at Coventry, spreading to Birmingham and other areas during the next few days. The strikers, on the promise of the Trade Union Executives to deal promptly with the questions at issue, returned to work on the 29th July; and on the 2nd August the Ministry of Munitions set up a special Committee, on which the Admiralty, the Ministries of Munitions and Labour, the Trade Unions, and the employers were represented, to inquire into the whole question of 'labour embargoes'. While this Committee was sitting, although isolated complaints continued to be made, the 'embargo' policy was practically suspended. The Report of the Committee, over which Mr. Justice McCardie presided, was issued on the 21st September 1918. While refusing to blame directly any particular official or department, the Report practically condemned the 'embargo' policy, considering especially that it had been introduced without proper consultation with the Trade Unions likely to be affected by it. The establishment, at the Ministry of Munitions, of a Joint Consultative Committee of Employers and Trade Unionists was proposed, and it was urged that suggested changes of policy, before being carried into effect, should be referred to this Committee. Action was taken upon this suggestion, and the Joint Committee was established in October; but the signing of the Armistice, on the 11th November 1918, prevented it from achieving any result.

CHAPTER X

THE REGULATION OF WAGES

WE have already dealt, in our discussion of dilution, with the methods adopted to regulate the wages of the male and female workers introduced under the various dilution schemes. These formed an integral part of the schemes themselves, and it was impossible to separate them from the other aspects of dilution. There remain, however, for discussion the methods adopted to deal with the numerous problems which arose during the war period affecting either skilled workers only, or skilled and less skilled in equal measure. These include both the methods adopted to govern the variation of wage rates in order to meet the steadily rising cost of commodities, and the attempts to speed up the output of munitions by the introduction of various systems of 'payment by results'.

As we have seen already,¹ the normal method of adjusting wages in the engineering and kindred industries before the War was by local settlements, varying from district to district, and arrived at either directly by local negotiation, or by appeal to a National Conference between the Engineering Employers' Federation and the Trade Unions concerned, where no local agreement could be reached. This method persisted into the war period; but, from the establishment of the Committee on Production² as an arbitration tribunal in March 1915, an increasing number of local disputes was referred to it for settlement by mutual consent of the parties. This tendency became almost general when arbitration became legally binding under the Munitions of War Act, 1915. From that time onwards practically all wage disputes in the engineering and kindred industries, except disputes arising directly out of dilution, were referred to the Committee on Production, or in a few cases to other arbitration tribunals specially constituted under Schedule I of the Munitions Act.³

¹ See Chapter III.

² See p. 61.

³ See Appendix, p. 235.

Although the Munitions Act laid down several alternative methods of arbitration, the Committee on Production thus became the recognized body for dealing with general wages claims for a variation in the 'district rates' paid in any particular locality. Resort was had to it by the Trade Unions representing the less skilled as well as the skilled workers; and, in the majority of cases, the same advances in weekly wages were granted to all grades of male labour. Women's cases, from the first, seldom came before the Committee on Production, and were usually dealt with, in 1915, by single arbitrators or special tribunals constituted under Schedule I; but, from the establishment of the Women's Special Arbitration Tribunal,¹ in March 1916, this was the body which dealt with almost all cases of women's wages, without, however, the same power to issue binding awards as the Committee on Production possessed; for it could only recommend the Minister of Munitions to fix certain rates, and it was within his discretion to refuse to act upon its recommendations.

The Committee on Production, in dealing with the claims which came before it during 1915 and 1916, maintained the pre-war practice of the engineering and kindred industries by issuing purely local awards, dealing in a piecemeal fashion with such local claims as were brought before it from particular districts. In practice, however, since the changes in the cost of living were the main factor determining its awards, each district tended, save under abnormal circumstances, to advance the same arguments, and the Committee found itself issuing, to one district after another, practically identical awards. If district A claimed an advance of 5s. a week, and was awarded 3s., districts B, C, D, and so on, at once came forward with demands for 5s., with a practical certainty that they too would get an award of 3s.

Both the members of the Committee on Production and the officials of the Trade Unions and Employers' Federations who had to argue each case before it therefore found themselves wasting an infinity of time in the repetition of practically identical arguments. This not unnaturally suggested the idea that much time could be saved if, for the war period at least, a national

¹ See pp. 104 ff.

method of varying wage rates could be substituted for the purely local methods then in force. This was made the easier because at this time the cost of living so far outweighed all other factors in the determination of wages claims as to be, in practice, the sole determinant in the great majority of cases. Accordingly, in February 1917, the principal Trade Unions connected with the engineering and foundry trades, under the auspices of the Committee on Production, entered into a 'National Agreement on General Wage Applications' with the Engineering Employers' Federation. During February and the following months, fifty Trade Unions signed this agreement on behalf of their members employed by firms belonging to the Engineering Employers' Federation. The agreement did not in theory apply to the shipyards; but in practice the Committee on Production, which dealt also with shipyard claims, made practically identical national awards for the shipbuilding industry. In addition, almost exactly similar agreements were subsequently made, under the auspices of the Committee on Production, governing the chemical, heating engineering, soap and candle industries, the waterside transport industry outside London, the Scottish building industry, and others. Largely similar agreements for the national determination of wages during the War were also concluded in a number of other cases.

The full text of this agreement, which continued to govern changes in wage rates throughout the remainder of the war period,¹ is as follows :

General Wage Applications.

Memorandum of Agreement between The Engineering Employers' Federation and the Unions Connected with the Engineering and Foundry Trades Arrived at in February 1917.

It is agreed that, having regard to the special circumstances of the War, the following shall be the principles upon which wage changes shall be arranged for the period of the War :

- (1) That existing agreements or practices under which applications for general alterations in wages are dealt with shall to that extent be suspended until the termination of the War, or for such further period as may be agreed upon by the parties thereto. This shall not refer to agreements or practices whereby the wages of any trades in

¹ It was finally terminated by the Trade Unions in 1920.

any district or department rise or fall with the fluctuations in another district or industry not covered by this agreement.

Nor shall it prevent the Unions bringing forward for special consideration at the hearings referred to in paragraph 2 (a) the case of any district in which they claim that the rates of wages are unduly low or that the total amount of war advance is not adequate.

On the other hand the Federation shall be entitled to bring forward for similar consideration any special cases they desire.

(2) During such period of suspension the following procedure shall be observed, provided the consent of the Committee on Production is obtained :

(a) The Committee on Production shall in the months of February, June, and October, after hearing the parties, consider what general alteration in wages, if any, is warranted by the abnormal conditions then existing and due to the War.

(b) The award of the Committee on Production shall be an award under the Munitions of War Acts, and shall be of national application to all federated firms in the branch of trade concerned.

(c) The first award shall take effect in all districts from the first full pay week in April, and the altered rate shall continue until amended by a further award in accordance with the provisions hereof. Subsequent awards shall specify the date upon which the alteration awarded shall take effect.

The following memorandum was also agreed between the parties : The Engineering Employers' Federation and the Unions whose signatures are appended hereto recommend to His Majesty's Government that arrangements should be made whereby all employers in the trade or trades affected should be subject to the awards which may be made by the Committee on Production in virtue of the agreement hereto attached.

List of Trade Unions Signatories to above Agreement.

Amalgamated Society of Engineers.
Steam Engine Makers' Society.
Society of Amalgamated Tool-
makers.

United Machine Workers' Associa-
tion.

Iron Founders' Society.

Boilermakers' and Iron and Steel
Shipbuilders' Society.

United Kingdom Society of Amal-
gamated Smiths and Strikers.

United Patternmakers' Association.
Scientific Instrument Makers' Trade
Society.

Electrical Trades Union.

Shipconstructors' and Shipwrights'
Association.

National Brassworkers and Metal
Mechanics.

United Journeymen Brassfounders,
Fitters, Turners, &c.

National Society of Coppersmiths,
Braziers, and Metal Workers.

British Steel Smelters', &c., Associa-
tion.

National Amalgamated Sheet Metal
Workers and Braziers.

Amalgamated Society of Carpenters and Joiners.	wrights, Smiths, and Motor Body Builders.
Associated Blacksmiths' and Ironworkers' Society.	National Union of General Workers.
Amalgamated Society of Core-makers.	National Amalgamated Union of Labour.
Amalgamated Society of Wood-cutting Machinists.	Iron, Steel, and Metal Dressers' Trade Society.
General Ironfitters' Association.	Amalgamated Machine Engine and Iron Grinders.
General Union of Braziers and Sheet Metal Workers.	Workers' Union.
Scottish Painters' Society.	National Amalgamated Union of Enginemen, Firemen, &c.
Sheet Iron Workers' and Light Platers' Society.	Dock, Wharf, Riverside, and General Workers' Union.
Amalgamated Society of House and Ship Painters.	Amalgamated Moulders' Union.
General Union of Carpenters and Joiners.	National Amalgamated Labourers' Union of Great Britain and Ireland.
Operative Bricklayers' Society.	Winding and General Engineers' Society.
West of Scotland Brass Turners', Fitters', Finishers', and Instrument Makers' Society.	Northern United Enginemen's Association.
United Kingdom Society of Coach-makers.	Amalgamated Society of Gas, Municipal, and General Workers.
London United Brass and General Metal Founders' Union.	London Society of Amalgamated Brass Workers.
Amalgamated Union of Cabinet Makers.	National Union of Operative Heating and Domestic Engineers.
London and Provincial Coach-makers' Trade Union.	Wheelwrights' and Coachmakers' Operatives' Union.
National Amalgamated Furnishing Trades Association.	Amalgamated Society of Railway Vehicle Builders, Wheelwrights, Carpenters, and Mechanics.
Amalgamated Society of Wheel-	

The first award under this agreement was issued on the 1st March 1917, and came into force on the 1st April. Up to this time, in the great majority of districts, the engineering workers had received advances amounting altogether to 7s. a week on pre-war rates. In some districts the amount was less, usually because the last cycle of advances accorded by the Committee on Production had not yet been applied. In a few cases it was greater; but this was either because advances arranged before the outbreak of war had only come actually

into operation after August 1914, or because an advance was at that time under negotiation and manifestly overdue.

The Committee on Production, in order to set the national system on foot, adopted 7s. as the minimum standard for advances due before the signing of the National Agreement, allowing higher advances to stand where they had been previously awarded. It then granted an additional advance of 5s. a week, bringing the total advances for the war period to 12s. up to April 1917.¹

At the time when this National Agreement and the first award under it were made, the Committee on Production still retained the form which had been given to it in February and March 1915, when it was originally created. That is to say, it consisted entirely of Government officials, who were presumed to take an 'impartial' view of industrial questions. By 1917, however, its work was so greatly increasing that some change in its organization was obviously required. It was, therefore, decided to enlarge the personnel of the Committee, and at the same time to re-constitute it on a different basis. It was accordingly reappointed on the 1st May 1917, and at this time, together with 'impartial' persons, certain prominent employers and Trade Unionists were appointed as full-time members of the Committee, which thereafter accomplished its work by dividing itself into panels. Each panel consisted of an 'impartial' person as Chairman, sitting with one employer and one Trade Unionist as a court of arbitration. Very occasionally, important cases were heard by a larger panel; but this was the usual form. Two panels were appointed in May 1917, and a third was added in July. A fourth panel was subsequently added. The Committee, in its reorganized form, remained in being until the end of the War, and was then re-appointed as a Court of Arbitration under the Wages (Temporary Regulation) Act of 1918. It was again re-organized by the Industrial Courts Act of 1919, and is still (1922) in being as the permanent 'Industrial Court' under that Act. During its first complete year of service, after its reconstitution in May 1917, it had 1,333 cases, despite the reduction in the number of separate cases caused by the conclusion of the national agreements described above.

¹ For a table of the general awards of the Committee on Production, see opposite.

From March 1917 onwards, national demands for increases in general district rates of wages were brought forward regularly by the Trade Unions in the munitions industries and in the other industries covered by similar agreements. In the case of the engineering and foundry trades, the four-monthly hearings provided for in the National Agreement yielded, during the war period, the following results :

COMMITTEE ON PRODUCTION
General Wage Awards
(Engineering and Foundry Trades)

<i>Date on which advance came into operation</i>	<i>Amount of advance</i>	<i>Total national war advances to date *</i>
	<i>s. d.</i>	<i>s. d.</i>
Up to April 1917 (various dates)	7 0 minimum	7 0
April 1917 . . .	5 0	12 0
August 1917 . . .	3 0	15 0
December 1917 . . .	5 0	20 0
April 1918 . . .	<i>nil</i>	20 0
August 1918 . . .	3 6	23 6
December 1918 . . .	5 0	28 6

* Excluding special advances to particular districts.

The above table relates only to the general national awards issued by the Committee on Production. In addition to these, numerous awards were issued for 'special districts' under Clause (1) of the National Wages Agreement. The Unions from the first set out to take full advantage of this clause for the purpose of advancing the rates of wages in the districts in which they had been, before the War, abnormally low, either because of defective Trade Union organization, or because the district had been recently established as an engineering centre, or was in the midst of an agricultural area in which the general level of wages was low. The aim of the Unions was mainly that of replacing, as far as possible, the purely local rates of the pre-war period by regional rates applicable over the whole of a much wider area. This aim was not completely achieved; but the 'special district' awards had resulted, by the end of the War, in a considerable approximation of rates on regional lines, and in a levelling up of rates in many of the smaller districts to those prevailing in the nearest big centres.

It will be seen from the table that the Committee on Production refused to award any increase in wages at the first of the four-monthly hearings in 1918. Thereby hangs a tale. In the account of the 'May strikes' of 1917, which was given in the last chapter, mention was made of the unrest which had arisen in the munition factories owing to the fact that skilled engineers were in many cases earning wages very much lower than those of the semi-skilled workers who had been promoted to higher classes of machine operations during the War. This was, indeed, the inevitable outcome of the policy which had been adopted from the very beginning of dilution, and definitely incorporated in the Treasury Agreement and the Munitions Act of 1915. Undertakings had there been explicitly given that dilution or substitution of one class of labour for another should not be allowed to 'affect adversely the rates customarily paid for the job', and a special clause had provided that—

Where the custom of a shop is changed during the War by the introduction of semi-skilled men to perform the work hitherto performed by a class of workmen of higher skill, the time and piece rates paid shall be the usual rates of the district for that class of work.

This understanding was amplified, and to some extent varied by Section 8 of the Munitions of War (Amendment) Act of 1917, a section drafted largely in order to meet the actual difficulties which had arisen in the working of the original Act, with the object of regularizing the procedure for varying piece-work prices. These were frequently varied even before this section became law; but variations had to be made surreptitiously, by evasions of the literal interpretation of Schedule II of the Act of 1915. The text of the new section of 1917 is as follows:

(1) The undertaking which the owners of a controlled establishment by virtue of Sub-section (4) of Section 4 of the Munitions of War Act, 1915, are deemed to have entered into shall include an undertaking that piece prices, time allowances, or bonuses on output, or the rates or prices payable under any other system of payment by results, once fixed in the establishment may not be altered except in accordance with any procedure which had been adopted by agreement between the owner of the establishment and the workmen or their representatives and is in force in the establishment at the passing of this Act or, by the direction of the Minister of Munitions, which direction shall not be given except in accord-

ance with an agreement between the owner of the establishment and the Trade Union representing the workmen affected by the alteration, or failing agreement, after consultation with the parties concerned :

Provided that this provision shall not apply where the alteration is made in accordance with the directions as to the rates of wages of female workers given by the Minister of Munitions under Section 6 of the Munitions of War (Amendment) Act, 1916, nor shall this provision apply to shipbuilding yards or ship repairing yards, but as respects such yards the Minister of Munitions or the Admiralty may make rules regulating the alteration of systems of payment by results therein.

(2) Where an alteration of a system of payment by results is made in accordance with the provisions of this section, paragraph 7 of the Second Schedule to the Munitions of War Act, 1915, shall not apply.

Naturally, when dilution took place, it was, as a rule, the less difficult part of the work of skilled men that was transferred to workers of a less degree of skill. In the case of women, the need for maintaining the previous piece-work rates could usually be avoided by a not too scrupulous employer, by the introduction, in connexion with the change, of some actual alteration in the machine or in the method of doing the job ; and this was frequently done even where no alteration was really necessary, with the effect, in many cases, of a quite arbitrary and unjustifiable cutting of piece-work prices. Where, however, less skilled men were merely substituted for skilled men on identical machines and operations, it was far more difficult to find a pretext for cutting the piece-work price, and this had, as a rule, at least until the Act was amended in 1917, to be maintained at its previous level.

The simpler work previously done by skilled men was thus transferred to less skilled workers, and the skilled men were concentrated more and more on work requiring a high degree of skill and accuracy. Now, before the War, it was, on the whole, far easier for a skilled man to earn a high piece-work balance beyond his time rate of wages on the simpler than on the more intricate part of his work, and he relied largely on getting enough of the simpler work to compensate for the loss of earnings on that which required the greater skill. When dilution was introduced, the skilled man thus found the less skilled, but better paid, part of his work taken away, and was left with

the difficult jobs, which could not be greatly hurried, and in which, therefore, high earnings could not be made. The disparity was greatly increased by the acceptance, for the sake of higher output, of what came to be known as 'war finish' on the simpler jobs. The men were urged to hurry, even at the cost of that amount of 'finish' which would have been regarded as essential for commercial purposes. The less skilled men on 'diluted' jobs thus made, in many cases, far more money than the skilled men whom they had wholly or partly replaced.

Engineering was, before the War, partly a 'time-work' industry, and partly an industry conducted on the method of 'payment by results'. On the whole, 'payment by results' was by far the more prevalent system on repetition work and in the less skilled grades, while time work predominated among the fully skilled workers. As dilution advanced, 'payment by results' was applied more and more widely, especially among the less skilled, including the male and female workers introduced under dilution. This again tended to increase the disparity of earnings, especially where the skilled men, who were on the whole hostile to 'payment by results', refused to accept its introduction.

The Ministry of Munitions, and the Government generally, aimed throughout the War at securing the widest possible adoption of 'payment by results'. Generally, this was not difficult to secure in the case of the less skilled workers, who saw in the system, especially under war conditions, a prospect of higher earnings. The skilled engineers, however, and some of the other skilled trades concerned with munition work, especially the wood workers, remained for the most part strongly opposed to any big extension of the system. At the beginning of 1917 the Government made a determined effort to get the Trade Unions to agree to a general introduction of 'payment by results' in all trades for the war period; and a conference, called by Mr. John Hodge, then Minister of Labour, was held with this object on 19th January 1917. This attempt, however, broke down in face of the opposition of the majority of the Unions of skilled workers; and, although systems of 'payment by results' were introduced or extended locally in a large number of cases during

the war years, there was no general adoption of them, and a high proportion of the fully skilled workers in the engineering and kindred trades continued to work under the time-work system.¹

Even if the Government had been successful in securing the general adoption of 'payment by results', this would not have solved the problem of the disparity of earnings between skilled and less skilled workers, although it would have greatly reduced its dimensions. The refusal of the Trade Unions to agree to this course, however, made some other way of dealing with the problem essential, and all the bodies of commissioners appointed after the 'May strikes' recognized the disparity as one of the principal causes of unrest. Accordingly, Mr. Churchill inserted into the Munitions Bill of 1917 the following clause, which became law with the passing of the Act on the 21st August 1917 :

Section 1 of the Amendment Act, 1917, provides that (1) If at any time during the continuance of the present war the Minister of Munitions considers it necessary, in order to maintain the output of munitions, that directions should be given with respect to the remuneration to be paid for work (being munition work or work in connection therewith or work in any controlled establishment), which at the time when the directions are given is paid at time rates, he may, subject always and without prejudice to any agreement made between employers and workmen with the consent of the Minister with respect to the remuneration of such work, by Order give such directions as he may consider necessary for the purpose of the maintenance or increase of output.

(2) Any contravention of or non-compliance with any such directions shall be punishable in like manner as if the Order in which the directions are contained was an award made in settlement of a difference under Part I of the Munitions of War Act, 1915, but where a difference has arisen respecting matters on which the Minister of Munitions has given directions under this Section the difference shall be referred to a special arbitration tribunal constituted under Section 8 of the Munitions of War (Amendment) Act, 1916.

(3) Any directions given under this Section may be varied from time to time, but shall not continue in force after the termination of the present war.

¹ 'Payment by results' was more extensively applied in some of the shipyard trades, largely at the instance of the special 'Shipyard Labour Department' established under the Admiralty in February 1917.

In pursuance of the powers conferred by this section, the Minister of Munitions at once appointed a Departmental Committee on the Rates of Skilled Day Workers (known as the 'Hills Committee').

The following were the terms of reference handed to the Committee :

To inquire into and to report upon the rates of skilled men on munition work employed on day rates, with special reference to the discrepancy between such rates and the earnings of less skilled men engaged under systems of payment by results, and the possible effect of this discrepancy in view of the decision to abolish the provisions of the Munitions Acts dealing with leaving certificates ; with due regard to the public interest both in the matter of expense and of the increased output of munitions of war.

This body got to work without delay, and on the 12th September its Report, which ran as follows, was in the hands of the Minister :

COMMITTEE ON RATES OF SKILLED DAY WORKERS.

Report.

The Committee make the following recommendations :

I. The Committee have limited their recommendations to skilled workmen employed on time rates in the Engineering Trades.

II. All skilled men employed on time (except those provided for in Clause III) shall receive the following bonus :

(a) If employed in shops where systems of payment by results obtain—
15 per cent. on their earnings.

(b) If employed in shops where manufacturing is done on time—
12½ per cent. on their earnings.

III. All skilled men employed on time in maintenance and repair of plant and machinery, in the production of light, heat and power, and in setting up, shall receive the following bonus :

(a) If employed in shops where systems of payment by results obtain—
12½ per cent. on their earnings.

(b) If employed in shops where manufacturing is done on time—
10 per cent. on their earnings.

IV. The foregoing provisions shall become operative on the first pay day after 6th October 1917.

V. Skilled men transferred by the employers temporarily from a system of payment by results to time work shall, in addition to their time rates, receive a bonus equivalent to the average of the bonuses earned by them for the four weeks prior to transfer.

VI. The foregoing provisions apply only to skilled workmen employed on time rates in the Engineering Trades and engaged in the manufacture of munitions of war, and shall not apply to semi-skilled or unskilled men and women introduced by dilution to the foregoing occupations. With regard to the building and repair of ships the foregoing provisions apply only to members of the Engineering Trades employed therein.

VII. Men who are at present in receipt of a bonus over and above their time rates shall be paid either the foregoing bonuses or their existing bonuses, whichever are the higher.

VIII. The foregoing provisions shall not apply to women who receive the skilled men's rate under Order 489 (clause 1 (b)).

IX. Nothing in the foregoing provisions shall affect the present basis of determining piece rates or premium bonus times or any other system of payment by results.

X. The additional labour cost entailed by the foregoing shall be dealt with by the contracting Departments on similar lines to previous advances made by the Committee on Production.

XI. The Committee are greatly indebted to their Secretary, Mr. John Murray, whose skill and experience have been of the greatest assistance.

(Signed) J. W. HILLS, Chairman.
J. M. McELROY.
W. J. LARKE.
A. GORMAN.
W. F. DAWTREY.
W. H. HUTCHINSON.
G. WILKINSON.
J. M. MURRAY, Secretary.

The Ministry of Munitions did not take action upon this report in the precise form which the Hills Committee had recommended; but, in the middle of October, a special Order was issued granting to certain classes of skilled time workers on munitions a bonus of 12½ per cent. payable on total earnings, including overtime and other allowances.

At first the 12½ per cent. bonus was confined to certain classes of skilled time workers who were in receipt of a rate of wages equal to the district rate for fitters and turners in any area. This excluded considerable sections even of the skilled time workers, who were receiving wages slightly below the fitters' and turners' rate. A demand for inclusion was at once put forward on behalf of these workers, and countless cases of doubt as to eligibility for the bonus immediately arose. Gradually the

bonus was extended to fresh classes of skilled men ; and now a vigorous demand for inclusion came from the organizations representing the less skilled workers, between whom and the lower ranks of the skilled it was very difficult to draw a clear line of demarcation. It was represented that the less skilled time workers were earning far lower wages than the less skilled piece workers, and that they had a right to share in the bonus. The argument was strong, and the Ministry of Munitions was finally convinced by it. On the 22nd November 1917 the 12½ per cent. bonus became payable to all grades of workers in the engineering and shipbuilding sections of munition work.

This extension may have been inevitable ; but it clearly defeated altogether the purpose with which the bonus had originally been designed—that of improving the position of the skilled time workers relatively to the less skilled. It became instead a means of raising the remuneration of time workers to a point nearer to that of workers on ‘ payment by results ’.

This, however, led at once to another difficulty ; for it soon appeared that, although many workers on systems of ‘ payment by results ’ were making ‘ good money ’, many others, especially under piece-work systems, were unable, at the piece-work prices offered, to earn any considerable balance, or sometimes any balance at all, over their time-work rates. Local investigations conducted at the end of the year both by the Ministry of Munitions and by the Amalgamated Society of Engineers showed this to be true to a quite unexpected extent ; and it was conclusively shown that the effect of the 12½ per cent. bonus would be, in many cases, to bring the earnings of day workers to a point in excess of the earnings of many piece workers of equal skill.

Faced with claims from additional trades, and from the workers employed on ‘ payment by results ’ in the trades to which the 12½ per cent. bonus had already been applied, for the extension of the Order, the Government decided to take the matter out of the hands of the Ministry of Munitions. On the 24th November 1917 the War Cabinet appointed a special ‘ Government Labour Committee ’, under the Chairmanship of Mr. G. N. Barnes, to deal with the question. A number of Orders

extending the bonus to fresh classes of time workers were issued during December 1917 ; and, meanwhile, the Government Labour Committee entered into consultation with the Committee on Production. At the end of December the Committee on Production was appointed to act also as a Special Arbitration Tribunal under the section of the Munitions Act of 1917¹ under which the 12½ per cent. bonus had been granted ; and thereafter this body dealt with claims for its extension. On the 24th January the War Cabinet, on consultation with the Committee on Production, decided to grant to all workers engaged in systems of ' payment by results ', in the trades to which the 12½ per cent. bonus had been granted, a corresponding bonus of 7½ per cent. Accordingly the following official notice was issued on that date :

OFFICIAL NOTICE re BONUS TO PIECE WORKERS ON MUNITION
WORK.

Since the issue of the notice which appeared in the Press on January 11th, the Government have had under consideration questions that have arisen in regard to classes of workmen claiming the benefit of the Orders under which the bonus to munition workers had been given, and on this matter the advice of the Committee on Production has been obtained. After careful consideration of this advice and of the whole position, the War Cabinet have decided to adopt the following as a settlement of claims made in regard to the bonus :

1. The 12½ per cent. has been given, under existing Orders and extensions thereof made by the Admiralty and the Minister of Munitions, to workmen employed on munition work (as defined in the Munitions of War Acts) and paid as plain time workers in engineering shops, boiler-shops, foundries, shipbuilding and ship repairing establishments, iron and steel trades, electricity generating stations and electrical contracting trades, nut and bolt trades, brass foundries and brass works, bridge building and constructional engineering, hollow-ware trade, spring-making works, hot stamping works, tube works and wagon-building works.

2. As from the beginning of the first full pay week which followed 1st January 1918, a bonus of 7½ per cent. on their earnings shall be paid to all workmen of 21 years of age and over employed in establishments or trades (other than iron and steel trades) covered by the existing Orders relating to plain time workers or extensions thereof, and engaged on munition work as defined in the Munitions of War Acts, who are piece workers or are paid on a premium bonus system, or any mixed system of time and piece or any system of payment by results, including men work-

¹ Quoted on p. 167 above.

ing at augmented time rates fixed in lieu of piece rates, or by reference to results or to output of work.

3. The $7\frac{1}{2}$ per cent. bonus shall be paid as an addition to any other bonus or war advances payable to the men concerned under any agreements or awards. Provided that any bonus or war advance, which in the case of time workers has merged in the $12\frac{1}{2}$ per cent. shall merge in the $7\frac{1}{2}$ per cent., and that no workman shall receive the $7\frac{1}{2}$ per cent. bonus who has already received in some other form some equivalent consideration for the $12\frac{1}{2}$ per cent. bonus. In any case where payment has been made to workmen, pending the general consideration by the Government of the position of men paid by results, the amount of such payment shall merge in the $7\frac{1}{2}$ per cent. bonus now authorized, and such bonus shall, as from this date, be in lieu of and in substitution for any such other payment.

4. A special conference shall be called of employers and Trade Unions concerned in the iron and steel trades to consider the form in which this bonus shall be applied, having regard to the terms of settlement arrived at in those trades in relation to the $12\frac{1}{2}$ per cent. bonus.

5. Any claims to participate in the $7\frac{1}{2}$ per cent. bonus not already dealt with by paragraph 2 shall be settled by the Committee on Production after hearing the parties concerned, under reference from the Ministry of Labour.

24th January 1918.

The granting of this bonus ended the main controversy ; but up to the end of the War countless claims, successful and unsuccessful, continued to be brought forward either for the extension of the bonuses to fresh classes of workers, or for their payment in cases in which it was complained that employers were wrongfully withholding them.

The Munitions Act of 1917 contained other important provisions relating to wages besides those which led to the concessions of the $12\frac{1}{2}$ per cent. bonus. Before the passing of this Act the awards of the Committee on Production, and of the other tribunals established under the Act of 1915, applied only to those employers who were actually parties to the arbitration proceedings. This meant, in the case of the engineering industry, that the awards were binding only on firms which were members of the Engineering Employers' Federation. In order to bring other firms into line, the Trade Unions had either to enter into separate negotiations with them individually, or, in case of difficulty, to cite them individually to appear before the Committee on Production or

some other arbitration tribunal with power to make binding awards. This procedure was very cumbrous, and meant in practice that it was many months before an award could be made generally operative throughout the industry, with the result that many awards had to be made retrospective, so as to include arrears of payment on the increased scale. In order to deal with this difficulty and to secure a fairer and more uniform procedure—a course of advantage alike to the employers and to the Trade Unions—the following clause was inserted in the amending Bill of 1917, and became law with the rest of the measure on the 21st August :

By Section 5 of the Amendment Act, 1917 : (1) Where an award as to a change in the rate of wages payable to persons engaged on or in connection with munition work, or as to hours of work or otherwise as to terms or conditions of, or affecting employment of, persons so engaged, has been made either under Part I of the Munitions of War Act, 1915, or in pursuance of an agreement between representatives of employers and workmen, and the Minister of Munitions is satisfied that the award is binding upon employers employing the majority of the persons engaged on or in connection with munition work in any trade or branch of a trade either generally or in a particular district, the Minister of Munitions may by order direct that the award shall be binding on all or any other employers and persons so engaged, either without modifications or subject in any particular cases to such modifications contained in the direction as the Minister may consider necessary to adapt the award to the circumstances of such cases, and in particular in order that no such other employer shall be enabled to pay less wages than are payable in the like circumstances by employers who were originally bound by the award.

(2) Where any such directions are given the award shall be binding not only on the employers and persons so engaged who are affected by the award as originally made, but also, subject to such modifications (if any) as aforesaid, on the employers and persons so engaged to whom the directions relate, and any contravention thereof or non-compliance therewith shall be punishable in like manner as if the award and the order in which such directions are contained were an award made in settlement of a difference under Part I of the Munitions of War Act, 1915, and had been made in respect of a dispute affecting such employers and persons so engaged.

From this time onwards, 'Extension of Award' Orders were issued regularly by the Ministry of Munitions in connexion with the four-monthly awards of the Committee on Production ; and

a great deal of unnecessary friction and expenditure of time was thereby avoided.

It was the practice of the Committee on Production to make clear in its awards that, in its view, its functions were limited to prescribing the wages to be paid during the period of national emergency, and that it was not its business to alter, save in exceptional circumstances, the actual basic rates of wages, or to say what wages should be paid when the war emergency was over. Accordingly, in its general and in many of its more localized awards, the following clause appeared :

The amounts hereby awarded are to be regarded as war advances, intended to assist in meeting the increased cost of living, and are to be recognized as due to and dependent on the existence of the abnormal conditions now prevailing in consequence of the War.

As the termination of the War drew nearer, men's thoughts naturally began to turn to the consideration of what would then occur in the cases where the existing conditions were regulated by temporary Acts, Orders, or Awards, confined to the war period. In July 1918 a special Committee of the Ministry of Reconstruction, over which Sir John Simon presided, issued a detailed and technical report on the 'legal interpretation of the term "war period"' in the numerous official documents and Acts of Parliament in which it was employed. On the 11th October a further Committee, again under Sir John Simon, was set up with the special task of making recommendations as to the future of compulsory wage awards, including both the awards of the Committee on Production and similar bodies, and the Orders governing men's and women's wages issued by the Ministry of Munitions. Previously, on the 7th August, the new Trade Boards Act, under which it was proposed to apply the Trade Board method of fixing legal minimum rates of wages to a number of additional trades, had passed into law ; but it was clear that it would take a considerable time to bring this measure into effective operation, and that, in any case, it would cover only a small part of the ground.

The result of the Simon Committee was the Wages (Temporary Regulation) Act, which became law on the 21st November 1918, ten days after the signing of the Armistice. Under this measure

the Committee on Production was retained under the new name of the Interim Court of Arbitration, and its power to make binding awards was continued and even extended. When a new award varying wages was not issued, the rates in force at the time of the Armistice were to continue as enforceable minimum rates for a period of six months from the 21st November. There was, however, an important difference. In accordance with pledges given to the Trade Unions during the War, compulsory arbitration and the prohibition of strikes were at once abolished by the repeal of the clauses of the Munitions Acts under which they had been imposed. The rates in force under the new Act were thus only *minima*, and there was no legal restriction on the workmen's right to obtain higher rates, by the strike or by any other normally lawful method, if they were able to do so. In practice, the Unions in the munitions trades continued for some time to submit their case to the Interim Court of Arbitration, and to accept its decision. The Wages (Temporary Regulation) Act was renewed, by a simple one-clause Act, for a further six months in May 1919, and modified provisions were inserted in the Industrial Courts Act of the 20th November 1919, making the rates then operative legally enforceable as *minima* until September 1920, when the emergency regulation of wages was allowed finally to expire. Under the Industrial Courts Act there was no power to vary the prescribed rates either upwards or downwards, except on a voluntary basis, the Interim Court of Arbitration being converted, as the 'Industrial Court', into a purely voluntary arbitration tribunal to which employers and workers could resort if they so desired.

CHAPTER XI

SUBSTITUTION ON WORK OTHER THAN MUNITIONS

As we have seen in earlier chapters, the relaxation of Trade Union customs and the substitution of less skilled for skilled workers was by no means confined to the munitions industries, although it was in them that it attained to its maximum dimensions, involved the most elaborate regulations, and attracted by far the most widespread attention. The Treasury Agreement, we saw,¹ applied not only to munition workers, but also to a considerable number of other groups, and was signed by representatives of the wool and worsted workers, boot and shoe operatives, transport workers and other sections, as well as by those of the metal-working trades. It was also countersigned by representatives of the Trades Union Congress and the General Federation of Trade Unions on behalf of the Labour movement as a whole.

Abrogation of Trade Union customs in the non-munitions industries began mainly in those trades which were largely engaged on various types of Government work. Pressure due to the huge growth of Government demands was experienced early in the war period in the wool and worsted, clothing and boot and shoe industries, which were engaged in the equipment of the forces. Some local agreements permitting the introduction of women and other less skilled workers on processes previously confined to skilled men were concluded during the latter half of 1915, and some infractions of pre-war customs took place without agreement. It was, however, from the beginning of 1916 onwards that the suspension of Trade Union customs took place upon a large scale, and that national agreements regulating and conditioning it began to be made in a number of important industries.

It would be tedious and unnecessary to attempt to give any exhaustive account of the numerous 'Substitution Agreements', as they came to be called, which were concluded between 1916 and 1918; and I shall confine myself, for the most part, to a purely

¹ See pp. 69-79.

general description, mentioning in more detail only a few of the most important agreements.

From the middle of 1915 onwards the Factory Department of the Home Office was busily engaged in promoting Substitution Agreements in as many industries as possible, and many of the agreements made were countersigned by representatives of the Home Office as well as signed on behalf of the Trade Unions and employers' associations concerned.

The earliest agreements concluded arose directly out of the Treasury Conference. Thus, on the 25th June 1915, a general agreement permitting the introduction of women on processes previously confined to men was concluded for the boot and shoe industry, Lord (then Sir G. R.) Askwith representing the Government in the negotiations. This agreement was purely general, and the actual details and the processes on which women might be introduced were left to be arranged subsequently in each locality. It was provided that the agreement as a whole should 'have effect only during the continuance of the present war'. It applied at first only to England and Wales; but on the 10th November 1915 a similar agreement was concluded for Scotland. Under these general agreements, a number of local agreements were made in the various centres, specifying in detail the processes and conditions on which women might be introduced.

The Trade Unions and employers' associations in the cotton industry also concluded a number of general and local agreements arising out of the Treasury Conference. The first of these was signed on the 27th July 1915, and others followed during August and September. The Scottish baking trade,¹ and the pottery industry,² were also the subject of agreements concluded during the latter part of 1915, and in both these cases the Home Office was a party to the suspension of Trade Union conditions, and also to accompanying relaxations of the Factory Acts.

The process of substitution was greatly hastened with the New Year. On the 12th January 1916 a general agreement to permit the introduction of women on processes to be decided thereafter was reached, under Home Office auspices, in the

¹ Agreement of the 7th July 1915.

² Agreements of the 12th of May and the 10th November 1915.

textile dyeing, bleaching and printing trades, and an agreed list of processes to which the agreement should apply was issued on the 30th March. Sectional agreements dealing with each branch of the trade were also concluded by the various Trade Unions and employers' associations, under the provisions of the general agreement. On the 23rd February a very similar general agreement was concluded, again under Home Office auspices, for the wool and worsted industries as a whole, and this again was supplemented by numerous sectional agreements during the following months. On the 5th May 1916 the Home Office followed up these successes by securing the conclusion of a general agreement for the wholesale clothing industry, the whole group of agreements having, of course, as its principal object an increase in the production of khaki clothing and similar forms of military equipment.

From April to September 1916 the Home Office and the Employment Department of the Board of Trade collaborated in an attempt to apply the method of substitution over a far wider area. A series of circulars and leaflets 'on the substitution of women in industry for enlisted men' was issued, each document dealing with a particular trade, and suggesting to employers the actual processes on which substitution might be brought about. This campaign led to the conclusion of a number of further agreements, of which the most important was the general agreement for substitution in the printing and kindred trades which was concluded on the 21st August 1916, a Home Office representative signing along with the representatives of employers and workers. Many further local and workshop agreements were also made; and, in the less organized trades, substitution took place to a large extent without any form of agreement.

All these preliminary measures led up to the general 'Substitution Scheme', which was launched by the Government in September 1916. The powers conferred on the Government under the Military Service Acts¹ had, of course, made the application of compulsion in some degree possible in industry, and the experience gained in the voluntary substitution of the earlier period made a more comprehensive system practicable. First, the scheme was

¹ See Chapter VIII.

explained at conferences in all parts of the country. Then local Substitution Committees, including Government, employers', and Labour representatives were formed, with the object of providing substitutes in order that men engaged on essential work might be released for military service. In December 1916 came the creation of the National Service Department and of a body of substitutes called 'National Service Volunteers', recruited by voluntary enrolment, but bound by their conditions of enrolment to work where they might be assigned by the National Service Department, the standard rates of pay for the job being guaranteed. In April 1917 this scheme was amended, and Advisory Trade Committees of employers and Trade Unionists were created in most organized trades, except the munitions trades, to facilitate the process of substitution. This elaborate scheme broke down, and was replaced in October 1917 by the 'War Work Volunteers Scheme', under which men were enrolled only for particular kinds of jobs, and not promiscuously for all forms of service. The general procedure remained the same as before; but from this time onwards substitution was carried on far more scientifically and with far greater effect. The above arrangements applied only to the provision of male substitutes; but side by side with them special arrangements were made for the substitution of women in all possible cases, and male substitutes were not allowed to be provided when it was considered that women were capable of doing the work required.

These special arrangements for women passed through a number of phases. In March 1915 the Government had launched a scheme of 'Women's War Service', appealing to all women who were 'prepared, if needed, to accept paid work of any kind—industrial, agricultural, clerical, &c.—to enter themselves upon the register of women for war service at the Labour Exchanges'. At this time there was still widespread unemployment among women workers, and the scheme drew a prompt protest from the War Emergency Workers' National Committee, which, on the 18th March 1915, passed the following resolution:

That this Workers' National Committee has had under serious consideration the circular, 'War Service for Women,' issued by the Board of Trade. The Committee points out that there are still 60,000 men and

boys and 40,000 women and girls on the live register of the Labour Exchanges for whom the Board of Trade has gone so far afield to find situations or provide training, whilst many thousands more are working short time. It further points out that the object of the Circular appears to be specially directed to obtain women's labour in agriculture, and that absolutely no safeguards are proposed to guarantee good conditions and fair wages. The Committee is strongly of opinion that in drafting women into any industries care must be taken to prevent the stereotyping of bad conditions and low wages or to endanger standard conditions where they obtain; that this should be secured by a tribunal representative of the organized wage-earners—men and women; and that further efforts should be made to find situations for those persons now on the register before taking steps to bring in fresh supplies of female labour.

This scheme proved abortive; but a number of organizations, private as well as public, came into existence during 1915 and 1916, and actively engaged in extending women's employment. These included the Women's National Land Service Corps, the Women's Land Army, the Women's Committee of the War Agricultural Committee, the Women's Section of the National Service Department, and many others. Special measures were also adopted, from April 1917, for the recruitment of women for service in the army itself, through the Women's Army Auxiliary Corps and similar units.

The Substitution Agreements mentioned at the beginning of this chapter followed, to a considerable extent, uniform lines. They dealt, for the most part, with three distinct groups of problems:

1. The extent to which, and the processes and occupations for which, women might be introduced;
2. the rates of pay and conditions of labour applicable to women so introduced, and any necessary modifications in the rates and conditions of the classes of workers already in employment;
3. the duration of the agreement, and the restoration of pre-war conditions at the conclusion of the War, including the reinstatement of men absent with the Forces or transferred to other types of work (e.g. munition work).

Under the first head, it is usually stated that women are to be

introduced on processes, previously confined to men, only where there is a definitely ascertained shortage of labour, and the Unions are unable to supply the workers required. It is also often specified that, before women are introduced, all the men in the trade must be *fully* employed. The hosiery, dyeing, bakery, clothing, and other agreements insist on these points. Usually, there is either, attached to the agreement, a detailed list of processes on which women may be introduced if the conditions are satisfied, or some procedure is laid down for the specification of the processes either by local agreement or by reference, in case of difference, to some approved tribunal. Where lists of processes were originally drawn up, they were often extended subsequently by further agreements.

On the second point there is more variation. The full concession of 'equal pay' is seldom secured, the outstanding instance of equal pay for men and women being that of the London omnibus workers. Where there was no change in operating methods consequent on the introduction of women, it was sometimes agreed that the men's piece-work prices should be paid; but this condition was often evaded, and deductions from piece rates were often allowed where it was alleged that the employment of women involved the employer in extra costs. Thus the pottery agreement allowed deductions to be made in respect of extra supervision, and the dyeing agreement laid it down that women were in no case to receive less than four-fifths of the rates of the men whom they replaced. In many cases the women were only put on 'payment by results' after an experimental period of training, during which very low time rates were payable. Equal time rates were hardly ever secured. Some of the agreements made no provision as to wages, leaving these to be adjusted locally in each particular case. In so far as there was a common principle behind the agreement, it seems to have been that women should be paid such rates as would make the cost of their labour to the employer as nearly as possible equivalent to the cost of the labour displaced. This has usually been the employers' interpretation of the phrase 'equal pay for equal work'.

On the third point, there was again a close similarity between the majority of the agreements. Returning soldiers were usually

guaranteed re-employment, either without specifications as to wages, or at the wages which they would have received if they had remained in continuous employment. In the cotton agreements this guarantee applied also to workers who transferred to munition work. The duration of the agreement was usually either confined explicitly to the war period, or to the period of actual shortage of labour due to the emergency. There were seldom actual provisions, in so many words, for the restoration of pre-war conditions; but these were usually implicit in the terms of the agreements.

The best drafted, and in some respects the most explicit agreement, is that for the wholesale clothing industry, signed on the 10th May 1916. This prescribed that 'females introduced to take the place of men on piece work shall be paid the same piece rates as the men they displace'; but contained no corresponding provision as to equal time rates. Minimum time rates, ranging from 4*d.* an hour up to 19 years of age to 6*d.* an hour at 20, were laid down; but a special probationary rate of 4½*d.* or 5*d.*, according to age, was prescribed for adult women learners for the first two months. The general provisions of the agreement were as follows:

1. The employers will, to the best of their power, reinstate all men who shall have left to join the colours but who return to civil life either during the continuance, or within a reasonable time after, the conclusion of the present war.

2. As soon as it is practicable after the conclusion of the War the employers will revert to the conditions prevailing in their respective factories and workshops before the War in regard to men's employment.

8. Females shall not be introduced to replace men if competent men of non-military age are available at the rates prevailing for the time being in the factory or workshop.

4. Any question under, or in connection with, this agreement (including that of the interpretation of the words 'conclusion of the present war') which may arise, either during the continuance of the present war or after its conclusion, shall be referred to the Home Office for settlement.

As fair samples of the more usual forms of substitution agreement, the two following, for the wool and worsted and printing industries, are selected for quotation:

SUBSTITUTION AGREEMENT FOR THE WOOL AND WORSTED INDUSTRIES.

1. That substitutions of men by women are temporary, and that those men who have joined H.M. Forces shall be entitled to be reinstated in their former employments if and when they return fit for resuming them. Men thus reinstated shall receive the rates of wages to which they would have been entitled had they remained in continuous employment.

It shall generally be considered that a man who is discharged from H.M. Forces without a pension shall be entitled to resume work at the standard rate of wages, other cases to be dealt with by the committee set up under the agreement.

2. That where new men are introduced into an occupation, such men shall be paid the local standard or scheduled rate for that occupation.

3. That where women in consequence of this agreement are employed to take the place of men, such women shall not continue to be so employed after men become available.

4. That where women are employed to take the place of men the rate of wages for such women shall be :

(a) If at piece rates the same as for men, unless women's rates are already established for that class of work, provided no woman shall receive less than the district rate for women.

(b) If at time rates for day-time work, and one or more women replace an equal number of men, they shall be paid the same rate of wages now being paid to males for an equivalent quantity of work, and in any case not less than four-fifths of the rate previously paid to the men they replace.

(c) If at time rates for day-time work, and a larger number of women are required to replace a smaller number of men, the aggregate wages paid to the women shall not be less than the aggregate wages paid to the men they replace, and in no case shall the wage paid to an individual woman be less than four-fifths of the wage previously paid to the man replaced.

5. That where any workpeople are not fully employed through shortage of work, the women who have taken the places of men shall be the first to be discharged or suspended, provided that qualified men can be found to do the work.

6. That a Central Joint Committee shall be appointed, consisting of seven representatives of the employers and seven of the workmen's representatives, the personnel of which may be changed from time to time by the two parties so far as their own representatives are concerned. The Committee shall have power to add persons for the purpose of obtaining evidence in support of any claim, it shall also settle the interpretation of the foregoing clauses and deal with any dispute that may arise, providing that such dispute cannot be settled by a local joint committee of the Employers' and Workmen's Associations, and is referred by that joint committee to the Central Joint Committee.

7. That where existing arrangements provide for the Trade Union to act as the medium for the supply of labour, such arrangements shall not be affected by this agreement.

8. The conditions of employment embodied in this agreement are temporary and designed only to meet the situation arising out of the War.

Signed on the 23rd day of February, 1916, on behalf
of 16 Employers' Associations and 19 Trade
Unions in the industries concerned.

PRINTING AND KINDRED TRADES.

Replacement of Men of Military Age.

Agreement between Employers and Operatives adopted at Joint Meeting
on July 21st, 1916.

1. During the period of the War and for such subsequent period as may be necessary to enable the Unions to supply labour, the Unions agree to such suspension of trade rules and customs as may be necessary to secure the carrying on of the trade, but subject to the conditions enumerated in the later paragraphs of this agreement.

2. This agreement shall come into operation only when or for so long as the individual Unions are unable to supply labour. It shall be regarded purely as a war emergency, and pre-war conditions shall be reverted to when the War is over.

3. Every employee leaving his employment to join His Majesty's Forces shall be guaranteed (a) reinstatement in his ordinary occupation where at all possible, and if he is in a position to satisfactorily discharge his duties; and (b) the wages he had when he left, plus any general advances or less any general reductions which have taken place in his absence in his branch area.

4. Where women are introduced to take the place of men, preference shall be given to those women already in the trade.

5. If any employer should, through shortage of work, find it necessary to reduce the staff in any department, it shall be incumbent upon him to dispense first with any female or other substituted labour that may have been introduced to take the place of males.

6. Questions of remuneration and other details under this agreement shall be settled between the Employers or their local Associations, and the Branches or National Executives of the Unions concerned.

7. Any cause of dispute arising under this agreement shall, at the request of either side, be referred for arbitration to a Committee consisting of not more than five representatives of the employers and not more than five representatives of the Unions concerned (the number of representatives to be fixed by agreement), and such Committee shall have power, if necessary, to appoint a referee to decide any point on which they are unable to agree, whose decision shall be final and binding upon both parties.

8. Nothing in the agreement shall be taken advantage of by either

side to alter the relations existing prior to the War between the Employers and the Unions in any district.

Signed on behalf of the Employers :

MEREDITH T. WHITTAKER,
Chairman of Committee.

REGINALD J. LAKE, Secretary.

Signed on behalf of the Printing and Kindred Trades Federation * :

C. W. BOWERMAN, President.

A. E. HOLMES, Secretary.

* The London Society of Compositors and the Association of
Correctors of the Press are not party to this Agreement.¹

GERALD BELLHOUSE, Chairman.

Home Office, August 21, 1916.

To what extent were the numerous agreements, to which reference has been made in this book, actually operative, and to what extent did actual replacement of workers of one class by others of lesser skill actually take place under them? In the case of male workers, it is impossible to make any attempt even to estimate the amount of dilution and substitution; for, if any records on this point exist at all in the archives of the various Government Departments, they have certainly never been either collected or made available. In the case of women, on the other hand, there are data, inadequate but considerable, showing with a sufficient approximation to accuracy the general extent of dilution and substitution.

In June 1918 the Board of Trade issued privately a memorandum on the 'Increased Employment of Women during the War', giving statistics up to January 1918. These were the figures, revised on most points up to July, which were used by the War Cabinet Committee on Women in Industry, which was appointed on the 5th September 1918 in consequence of the growing demand for higher pay for women, and for the concession of the principle of 'equal pay'. According to these figures, the total number of women employed in occupations of all sorts, non-industrial as well as industrial, rose by 1,345,000 between July 1914 and July 1918. For industry alone, the increase was 792,000, and the total number of women employed rose from 2,178,600 to 2,970,600. The following tables give the full figures, roughly sub-divided into groups :

¹ These Societies were successful, throughout the war period, in preventing women from being introduced.

SUBSTITUTION ON WORK

INCREASED EMPLOYMENT OF WOMEN DURING THE WAR

<i>Numbers of Women Working</i>	<i>In July 1914</i>	<i>In July 1918</i>	<i>In July 1918 over (+) or under (-) num- bers in July 1914</i>
On their own account or as Employers	430,000	470,000	+ 40,000
In Industry	2,178,600	2,970,600	+ 792,000
In Domestic Service	1,858,000	1,258,000	- 400,000
In Commerce, &c.	505,500	934,500	+ 429,000
In National and Local Government, including Education	262,200	460,200	+ 198,000
In Agriculture	190,000	228,000	+ 38,000
In employment of Hotels, Public Houses, Theatres, &c.	181,000	220,000	+ 39,000
In Transport	18,200	117,200	+ 99,000
In other, including Professional em- ment and as home workers	542,500	652,500	+ 110,000
Altogether in Occupations	5,966,000	7,311,000	+ 1,345,000
Not in occupations but over 10 Under 10	12,946,000 4,809,000	12,496,000 4,731,000	- 450,000 - 78,000
Total Females	23,721,000	24,538,000	+ 817,000

INCREASED EMPLOYMENT OF WOMEN IN INDUSTRY DURING THE WAR

<i>Trades</i>	<i>Estimated number of Females employed in July 1914</i>	<i>Estimated number of Females employed in July 1918</i>	<i>Difference between number of Females employed in July 1914 and July 1918</i>	<i>Percentage of Females to total number of Workpeople employed July 1914 July 1918</i>	<i>Estimated number of Females directly replacing Males in Jan. 1918</i>
Metal	170,000	594,000	+ 424,000	9 25	195,000
Chemical	40,000	104,000	+ 64,000	20 39	35,000
Textile	863,000	827,000	- 36,000	58 67	64,000
Clothing	612,000	568,000	- 44,000	68 76	43,000
Food, Drink, and Tobacco	196,000	235,000	+ 39,000	35 49	60,000
Paper and Print- ing	147,500	141,500	- 6,000	36 48	21,000
Wood	44,000	79,000	+ 35,000	15 32	23,000
China and Earthen- ware	32,000	197,100	+ 93,000	4 10	62,000
Leather	23,100				
Other	49,000				
Government esta- blishments	2,000	225,000	+ 223,000	3 47	197,000
Total	2,178,600	2,970,600	+ 792,000	26 37	704,000

It will be seen from the second of these tables that by far the greatest increase in the employment of women occurred in the metal trades. The large figure given for Government establishments, moreover, 'consists mainly of women introduced into dockyards and munition factories owned by the State'. Beside these figures the others seem almost insignificant; but attention should be paid to the final columns as well as to that which shows the actual increase in the number of women employed. In many trades the War led to a very great restriction in the total numbers of workers employed, and the actual number of women therefore declined, though not in proportion to the decline in the number of men. Thus, in the clothing industry, the number of women employed had declined by 44,000; but of the reduced total 43,000 were directly replacing men, and the percentage of women to the total number of workers employed in the industry had risen from 68 to 76 per cent. Probably most of the figures in the table tend to under-estimate the total volume of substitution; for there was always a strong tendency for employers, in order to avoid having to pay male rates of wages, to assert in all doubtful cases that the work on which women were employed was not men's work, but work on which women would have been employed, if the work had been executed at all, even before the War.

CHAPTER XII

THE RESTORATION OF PRE-WAR PRACTICES

IN the chapters dealing with the suspension of Trade Union customs and the introduction of dilution, a number of references have already been made to the pledges given by the Government, in or in connexion with the Treasury Agreement and the Munitions of War Acts, that Trade Union customs abrogated during the war period would be restored, if the Unions so desired, after the conclusion of the War. In the proposals put forward by the employers before the first Treasury Conference, and rejected by the Trade Unions, the question of 'restoration' was already raised, and the employers suggested that the following form of words should be included in the proposed agreement :

The following arrangements shall have effect during the War, and shall in no way prejudice any of the parties on any of the points covered, and the parties shall at the termination of the War, as the Federation and the Unions now undertake, revert to the conditions which existed in the respective shops on the outbreak of hostilities.

Again, in the Shells and Fuses Agreement of the 5th March 1915, the introduction of less skilled grades of labour on skilled work was explicitly limited to the war period; it was promised that 'dilutees' should be 'first affected by any necessary discharges either during or after the period of the War', and an undertaking was given by the Engineering Employers' Federation that 'the fact of the restrictions being temporarily removed shall not be used to the ultimate prejudice of the workpeople or their Trade Unions'. The employers also agreed that 'these proposals shall not warrant any employer making such arrangements in the shops as will effect a permanent restriction of employment of any trade in favour of semi-skilled men or female labour.'¹

In its Report urging dilution, the Committee on Production, as we have seen,² proposed a form of guarantee to be given by all firms introducing dilutees that 'any departure during the War

¹ For the full text, see pp. 67-8.

² See pp. 63-6.

from the practice ruling in our workshops and shipyards prior to the War shall only be for the period of the War—and shall not be allowed to prejudice the position of the workpeople in our employment or of their Trade Unions in regard to the resumption and maintenance after the War of any rules or customs existing prior to the War'. This guarantee was, in substance, incorporated in the Treasury Agreement, and was the basis of Schedule II of the Munitions of War Act, 1915.

Under the Munitions Act the undertaking to restore Trade Union practices, or at least to place no obstacle in the way of their reimposition by the Trade Unions, was limited to the special class of 'controlled establishments'¹ and was operative, for any particular establishment, only from the date of 'control'.² The Munitions Act, therefore, did not supersede the Treasury Agreement, or the other undertakings previously given, which continued to apply to establishments which were not 'controlled', and to changes introduced in 'controlled establishments' prior to the date of 'control'. Speaking on the Munitions Bill in the House of Commons on the 1st July 1915, Mr. Arthur Henderson stated that, in accordance with the recommendations of the Committee on Production, 'this schedule has been operating since the 19th March, and has been made a condition of Government contracts that have been given out since that date.'

The importance of the Treasury Agreement was not only that it ante-dated by several months the guarantees given in the Munitions of War Act, but also that it applied to a large number of operatives not included within the scope of the Act, such as textile workers, railwaymen, transport workers, and boot and shoe operatives. The list of Trade Unions represented at the Conference³ clearly indicates its wide scope, and the intention that it should apply to all kinds of Government contracts.

The Treasury Agreement, however, was not a legally binding document, and, although under it employers had given guarantees of restoration in terms practically identical with those of the

¹ See p. 78.

² On this point, compare the wording of the Treasury Agreement (p. 72) with that of Schedule II (p. 79).

³ See p. 70.

Munitions Act, no penalty could be exacted for breach of these undertakings without further legislation.

Both this fact, and the inadequacy of the provisions for 'restoration' included in the Munitions Acts themselves, were speedily realized by the Trade Unions; and, during the summer of 1916, the Joint Committee on Labour Problems after the War, which represented the principal national labour bodies, set up a special Committee on the Restoration of Trade Union Conditions, with instructions to examine the position in detail, and suggest measures for making the guarantees effective. In four Reports issued between September 1916 and June 1917, this Committee made its proposals, and out of its work, and the parallel work done by the Amalgamated Society of Engineers, arose the demands for fuller provisions for restoration which were made in connection with the Munitions Bill of 1917. We have seen already how Dr. Addison conceded most of the Trade Union demands on this head, and how Mr. Churchill, on succeeding him as Minister of Munitions, dropped the concessions in respect of restoration, together with the demand for dilution on commercial work, and rushed the Bill through in an abbreviated form in August 1917.¹ At the same time Mr. Churchill promised that the outstanding questions, including 'restoration', should be dealt with in a further Bill to be introduced during the autumn session. This Bill, however, was no more heard of, and it was only after constant pressure had been applied by the Trade Unions that a draft Bill for the 'Restoration of Pre-War Practices' was at last presented to the Trade Unions on the 5th November 1918, less than a week before the Armistice. Long negotiations followed; and the Bill did not finally become law until August 1919, eight months after the conclusion of the War.

In these protracted negotiations, which extended over practically the whole of the war period, a great deal turned on the actual pledges which had already been given by the Government when dilution was originally introduced. It has therefore seemed desirable to set out in an appendix (see Appendix C) the most important passages from these pledges, which, it will be seen, were given by many different spokesmen of successive Govern-

¹ See Chapter IX.

ments.¹ Whoever reads these pledges will be in no doubt that each of the War Governments was committed up to the hilt, not merely to place no obstacle in the way of the restoration of Trade Union customs after the War, but to co-operate actively in restoring them, and to guarantee their re-establishment wherever the Unions desired to see them restored. The pledges were explicit and often repeated, and every member of the War Governments who was concerned with munitions supply at some time endorsed them. Moreover, the assurances given were not limited to the fulfilment of the pledges actually incorporated in the earlier Munitions Acts. They were general and inclusive, and committed any Government that might be in power at the end of the War to take all measures necessary for their redemption. For the most part the pledges were given with the fullest publicity, and this publicity was essential to generate the assurance of protection which was needed before dilution could be brought effectively into operation.

In addition to these public pledges, the following private pledge, endorsed by Mr. Balfour on behalf of the Unionist Party, then still in opposition, and by the Imperial Defence Committee, was given to the representatives of the Amalgamated Society of Engineers at the second Treasury Conference of the 25th March 1915 :

Mr. Lloyd George : The third point you put to me is that you want something signed by the Chairman of the Imperial Defence Committee on behalf of the Government. . . .

I understand it is rather for the purpose of enabling the workmen to feel that the Government undertake the responsibility to see that the *status quo* is restored. As I understand, they want to bring us in, I think quite rightly. They say, ' We cannot trust the individual employers and firms, and therefore we must feel that the Government realize it is also their responsibility to support us in restoring the *status quo* '. I think that is perfectly fair.

I have had an opportunity during the interval of consulting with Mr. Balfour upon this subject. I need hardly tell you that is a very important matter, because Governments come and go, and it is rather important you should have a distinguished and dominant personality of

¹ The Asquith (Liberal) Government, the Asquith (Coalition) Government, and the Lloyd George Government.

the other great Party of the State express his views on that point. He feels that quite as strongly as I do. (Hear, hear.)

Mr. Balfour : That is a matter of honour.

Mr. Lloyd George : It does not mean that any rules and regulations are going to be like the laws of the Medes and Persians. But that is a matter you will have to fight amongst yourselves at a future time. Our business is to see, if you press it, that the *status quo ante bellum* is restored ; and Mr. Balfour takes exactly that view. You have relaxed your rules for the purpose of the War, and during the War, and you have done it at the request of the Government. You have done it for the benefit of the State. Therefore we feel that if at the end of that period you are of opinion that the pre-war conditions should be restored, it is an obligation of honour on our part to support your claim in that respect.

In its published form, this pledge appeared in the signed agreement of the 25th March 1915, in the following words :

That the Government will undertake to use its influence to secure the restoration of previous conditions in every case after the War.¹

The Munitions of War (Amendment) Act, 1916, in the following section, added one important new pledge to those included in the Treasury Agreement and the Act of 1915 :

Where non-union labour is introduced during the War into any class of work in a controlled establishment in which it was the practice prior to the War to employ Union labour exclusively, the owner of the establishment shall be deemed to have undertaken that such introduction shall be only for the period of the War, and if he breaks or attempts to break such an undertaking he shall be guilty of an offence under the principal Act and liable to a fine not exceeding £50 ; but, subject as aforesaid, such introduction shall not be deemed to be a change of working conditions.

Many departures from Trade Union custom were made in the Royal Dockyards, in Woolwich Arsenal, and in other establishments under direct Government ownership. These were not covered either by the Treasury Agreement or by the Munitions Acts ; but the verbal pledges quoted above applied, and the following answer, given to a Labour question by the Prime Minister in the House of Commons on the 21st August 1916, made the Government's understanding of the position fairly clear :

The Crown, not being expressly named in the Munitions of War Act, 1915, is not as a matter of law bound by its provisions. There is a special

¹ See p. 74.

machinery for settling such questions in the dockyards to which it seems desirable to resort in the first instance. There are other cases in which it is practically impossible to arbitrate in regard to isolated classes without reference to the interest of others. It is quite recognized that, subject to exceptional cases, the spirit of this provision of the Act should be observed by Government Departments.

In addition, the following section was included in the Act of 1916 :

The Minister of Munitions may by Order declare any establishment or establishments belonging to or under the control of His Majesty or any Government Department in which munition work is carried on to be a controlled establishment or controlled establishments as the case may be, and thereupon the provisions of the Munitions of War Act, 1915, and this Act relating to controlled establishments shall apply to such an establishment or establishments subject to such modifications and exceptions necessary to adapt those provisions to such an establishment or establishments as may be specified in such an Order.

It is not necessary to enter fully into the difficulties which arose in the attempt to give to all these guarantees a practicable legal form. The main problem lay in the ambiguity of the Act of 1915 on the question of the procedure to be adopted in securing restoration, and in the absence of legal sanction for the Treasury agreements of the same year. A workable procedure was finally laid down, and the Treasury Agreement given legal sanction, by the Restoration of Pre-War Practices Act, which, in its final form, was an agreed measure between the Trade Unions and the employers, drawn up at a series of conferences extending from November 1918 to June 1919.

The principal sections of this Act¹ are as follows :

1.—(1) Where in any establishment to which this Act applies, any rule, practice, or custom obtaining before the War in any industry or branch of an industry (hereinafter referred to as a trade practice) has, during and in consequence of the present war, been departed from, the owner of that establishment shall be under an obligation, at the expiration of two months from the passing of this Act, to restore or permit the restoration of the trade practice so previously obtaining, and for one year after such restoration is effected, or if it has been effected before the date of the passing of this Act for one year after that date, to maintain or permit the continuance of the trade practice.

2.—(1) If any person fails to comply with an obligation imposed upon him by this Act, he shall be guilty of an offence under this Act, and on

¹ Quoted in full in Appendix D.

conviction shall be liable to a fine not exceeding twenty-five pounds for each day or part of a day during which the offence continues. . . .

(4) If an agreement has been entered into providing for the modification of an obligation under this Act, to which the owner of an establishment is a party, or to which any group or association of employers of which the owner is a member is a party, it shall be a good defence in any proceedings against him in respect of an alleged breach of his obligation if he proves that the breach is authorized by the agreement, and that the Trade Union whose custom it was before the War to maintain the trade practice to be modified, is a party to the agreement, or a member of a federation of Trade Unions who are parties thereto.

Both in the Treasury Agreement and in the Munitions of War Act, it was laid down as a condition of dilution that a full record must be kept of all cases in which departures took place from pre-war practice. This undertaking cost the Trade Unions a great deal of trouble to enforce ; for, despite the guarantee by which they were bound, the vast majority of employers showed very great reluctance to make such records. From the signing of the Treasury Agreement, this question, as well as others arising out of the Agreement, was placed by the Trade Unions in the hands of the National Labour Advisory Committee, but this body showed little activity in getting departures recorded during the early period. Shortly after the establishment of the Ministry of Munitions, some steps were taken to bring to the notice of employers their obligation to make 'Records of Departures', and, in connexion with the Dilution Scheme of October 1915, a letter (Circular C.E. 2) was sent to all 'controlled establishments' instructing them to carry out their undertaking. Shortly afterwards Local Labour Advisory Committees were formed in a number of centres under the National Labour Advisory Committee, and these were also instructed to see that records were obtained on behalf of the Trade Unions. The procedure was, however, at this stage, extraordinarily cumbrous ; and the great majority of employers took no notice of it. Early in 1916 the Amalgamated Society of Engineers set up a special department of its own to see that departures were duly recorded and registered at the Ministry of Munitions, and also started an agitation for better methods of official collection. The Clyde Dilution Commission, by making its own records in the shops which it visited,

slightly improved the position in that area ; but only a very small percentage of the total number of departures made during 1915 and 1916 had been recorded at all by the end of the latter year. Reporting on the position in September 1916, the Labour Committee on the Restoration of Trade Union Conditions ¹ wrote as follows :

Under the Munitions Acts, the Treasury Agreement, and the various agreements for the dilution of labour, an official record must be kept of all departures from Trade Union rules or custom in establishments which take advantage of these agreements. It is unfortunately the fact that a very large number of the changes made have not yet been recorded, and that there are few signs of improvement in the pace at which records are coming in.

This may be attributed largely to the unwillingness or neglect of employers to furnish records of their own accord, but also largely to the apathy of Trade Unionists themselves. In addition, much of the fault lies in the defects of the methods by which the records are gathered and distributed.

The Committee at the same time described the method adopted in recording departures, and made proposals for its improvement. These recommendations produced some effect, and, in December 1916, the Ministry of Munitions adopted revised and greatly improved methods of securing records, throwing the responsibility for their collection from the employers on the divisional officers of the Ministry, and considerably speeding up the whole process. The result was that, during 1917 and 1918, far better records were kept, and some even of the arrears of previous years made up. It is probable, however, that up to the very end of the War only a minority of the actual changes made was recorded either by the employers or by the Trade Unions.

It was anticipated, during the war period, that very great difficulty would arise in securing the effective restoration of pre-war practices on the conclusion of the War. In fact, this was not the case. Restoration took place, in the majority of instances, considerably before the final passing into law of the Restoration of Pre-War Practices Act ; and the number of actual prosecutions of employers under the Act was quite extraordinarily small. This is to be explained by a combination of causes. In the first

¹ See p. 190.

place, the skilled workers in many establishments simply insisted, as soon as munitions ceased to be manufactured, on a return to pre-war conditions in connexion with the 'change-over' to normal forms of production. They were in a strong position for doing this because employers were anxious to get their works re-started, and fearful of the dislocation of labour which might result from a refusal to implement their pledges. More important, however, was the fact that those who foresaw a determined attempt by employers to keep dilution after the War had, to a large extent, misunderstood the nature of the war-time changes, and greatly over-estimated their probable influence on post-war method of production. In fact, most of the forms of dilution introduced during the War, while they afforded important lessons for further application to the technique of production, were not suited for direct and immediate application to the forms of normal production to which employers reverted when their contracts for munitions came to an end. Restoration was therefore carried through, in a majority of cases in which the Trade Unions desired it, largely by direct workshop action and with far less friction than any one had supposed to be possible.

This is not to say that the precautions taken by the Trade Unions during the war period were unnecessary for the safeguarding of the skilled workers ; for, had no such measures been taken, the course of events after the War would probably have been different, and employers, instead of following the line of least resistance by allowing Trade Union customs to be restored, would probably have opposed restoration and endeavoured to reduce their wages bill by the retention on skilled work of a larger proportion of diluted labour. As matters stood, they preferred to await a more propitious occasion, when fresh experiments in productive technique could be carried out without being hampered by guarantees given under the pressure of war necessity. Their policy will probably manifest itself gradually after the expiration of the periods for which they are under a legal obligation to permit the maintenance of the Trade Union customs which have been restored. Under the Restoration of Pre-War Practices Act, this legal obligation remained in force for a period of one year from the date of restoration ; but there has hardly been time as yet for the effects of its expiry to become manifest.

CHAPTER XIII

TRADE UNION DEVELOPMENTS

WE have seen, in an earlier chapter, that the numerical strength of Trade Unionism was rapidly increasing during the years which immediately preceded the War. Thus the membership of the Unions engaged in organizing metal workers,¹ which had only risen from 335,000 to 370,000 between 1904 and 1910, rose sharply to 557,000 in 1914. During the same four years the number of organized carpenters and joiners rose from 65,000 to 97,000, while the membership in all trades of the general labour Unions rose from 118,000 to over 400,000. The total membership of all Trade Unions grew from 2,446,000 in 1910 to 3,959,000 in 1914.

During the War the rapid increase in membership was fully maintained. Thus, during the period 1914-18, the growth of membership (in thousands) in the groups mentioned above was as follows :

	1914	1915	1916	1917	1918
Metal working	557	633	695	847	951
Carpenters and Joiners	97	101	102	114	136
General Labour	400	452	509	732	1205
ALL TRADE UNIONS	3,959	4,141	4,399	5,547	6664

These figures, however, despite the rapid growth which they reveal, have the effect of an under-estimate of the real increase ; for many Trade Unions removed from their books those members who were absent on war service. This fact, as well as the big organization campaign which followed the conclusion of the War, helps to explain the further big increases which took place in 1919 and 1920, bringing the total strength of the Trade Union movement to well over eight millions. 8,023,000, distributed as follows among the various occupational groups, was the estimate of Trade Union strength at the end of 1919 made by the Ministry of Labour in 1920, and published in the *Labour Gazette* of December 1920 :

¹ Not including either the less skilled workers organized in general Unions, or the craftsmen organized in woodworking, &c., Unions, but employed in the metal industries.

TRADE UNION MEMBERSHIP, 1919

(From *Labour Gazette*, December 1920)

<i>Trade Group</i>		<i>Total Membership at end of 1919</i>
Building :		
Bricklayers and Masons		66,884
Carpenters and Joiners		151,525
Painters and Decorators		71,568
Builders' Labourers		103,587
Others		34,922
Mining and Quarrying :		
Coal Mining		1,034,424
Other Mining and Quarrying		34,922
Metal, Engineering, and Shipbuilding :		
Iron and Steel Manufacture		145,173
Ironfounding, Engineering, and Shipbuilding		848,558
Other		80,881
Textile :		
Cotton		441,788
Woollen and Worsted		126,900
Linen and Jute		67,764
Hosiery		32,778
Other textile		35,976
Textile Bleaching, Dyeing, Finishing, &c.		103,894
Clothing :		
Boot and Shoe		106,563
Tailoring and other Clothing		155,657
Transport :		
Railway		624,385
Tramway and other Road Transport		222,839
Seafaring		172,371
Dock, Canal, and Riverside Labour		113,302
Agriculture and Fishing		202,616
Paper, Printing, and Allied Trades		192,434
Woodworking and Furnishing :		
Furnishing		41,125
Coach Building		46,683
Other		37,289
Pottery		40,377
Chemical and Glass		25,559
Food, Drink, and Tobacco		63,320
Leather		29,091
Teachers		182,637
Entertainment Workers		41,403
Banking and Insurance		64,786
Shop Assistants, Clerks, &c.		266,483
Enginemmen		54,592
Miscellaneous		70,485
General Labour		1,490,609
Employees of Public Authorities		390,396
Total		8,023,761

These figures do not include the considerable further growth which took place in 1920. Probably the total reached well over 8,500,000 before it began to recede with the increase of unemployment during the latter part of 1920.¹

It will be seen that the most rapid growth of all took place in the general labour group, concerned principally in the organization of the less skilled workers. The following figures, showing the actual growth in this group, are without parallel in any other section of the Trade Union movement :

GENERAL LABOUR UNIONS

	1914	1915	1916	1917	1918	1919	(Approx.) 1920
*General Workers, National Union of .	110,073	133,214	152,073	256,380	347,346	427,225	450,000
†Gas, Municipal, and General Workers, Amal. Soc. of .	12,881	17,240	20,482	25,124	34,581	44,673	50,000
Labour, National Amal. Union of .	55,453	70,430	85,836	123,627	143,931	155,220	170,000
Labourers' Union, National Amal. .	5,164	5,238	5,770	6,000	6,083	6,467	10,781
Warehouse and General Workers' Union, National .	6,188	7,688	15,322	12,000	35,000	60,000	96,000
Women Workers, Na- tional Federation of	10,164	17,855	27,781	40,000	50,000	30,000	30,000
Workers' Union .	159,600	195,750	197,000	230,000	379,000	495,000	500,000

* Till 1914 known as National Union of Gasworkers and General Labourers.

† Till 1914 known as Amalgamated Society of Gasworkers, Brickmakers, and General Labourers.

Note.—These figures do not include either the Dock, Wharf, Riverside, and General Workers' Union or the Irish Transport and General Workers' Union, which are usually classified as transport Unions but have a large general labour membership. The former rose from 42,000 in 1914 to 133,000 in 1920, about half of the membership, in 1920, being general workers. The Irish Transport Union rose from about 25,000 in 1914 to 150,000 in 1920, the great majority at the latter date being general workers.

While these figures cannot be paralleled in any other section, the growth among the more skilled workers in the engineering and kindred trades was also remarkable, as the following table will serve to show :

8,482,998 is the figure for the end of 1920.

MEMBERSHIP OF ENGINEERING UNIONS, 1916-20¹

	1916	1917	1918	1919	(Approximate) 1920
<i>(A) General Engineering :</i>					
Amalgamated Society of Engineers	230,231	273,103	293,782	320,604	459,987
Steam Engine Makers	21,850	25,328	27,206	29,392	29,000
Amal. Tool Makers, &c. . . .	24,454	34,470	39,628	46,962	47,000
United Machine Workers . . .	17,524	21,425	23,374	24,607	25,000
Scientific Inst. Makers . . .	4,376	6,000	6,000	6,455	7,000
<i>(B) Electrical Engineering :</i>					
Electrical Trades Union . . .	12,929	20,621	31,000	45,117	58,000
<i>(C) Brass and Copper :</i>					
Nat. Soc. of Brassworkers . . .	17,792	25,000	28,603	29,000	32,000
Assoc. Brassfinishers	6,819	7,298	7,500	7,600	8,300
United Journeymen Brassfounders {	3,080	3,500	4,000	4,000	4,000
Nat. Soc. of Coppersmiths, &c. .	916	1,050	1,000	1,000	1,000
Scottish Brassmoulders	1,100	1,000	1,000	1,500	1,350
W. of Scot. Brass Turners . . .	402	550	515	623	456
London United Brass and Metal Founders	364	382	420	402	540
<i>(D) Smithy Workers :</i>					
Associated Blacksmiths	13,864	17,238	18,265	20,823	22,848
Smiths and Strikers	9,867	11,100	12,199	12,400	13,000
<i>(E) Patternmakers :</i>					
Patternmakers	9,312	10,005	10,407	11,668	12,566
<i>(F) Ironfounders :</i>					
Friendly Soc. of Ironfounders . .	28,459	32,556	33,449	38,367	40,930
Assoc. Ironmoulders	7,511	8,000	8,496	9,611	6,910
Central Ironmoulders	5,891	6,290	6,364	6,500	6,910
General Iron Fitters	1,812	1,812	1,820	1,915	1,812
Coremakers	2,815	3,192	3,262	3,540	3,800
Amal. Moulders	1,332	1,550	1,700	2,000	3,500
Assoc. Moulders	509	550	605	614	645
Iron, Steel, and Metal Dressers .	2,800	3,500	3,000	3,300	3,550
Iron, Steel, and Brass Dressers of Scotland	1,737	1,799	1,843	2,000	2,000
Stove, Grate, and General Light Metal Workers	2,069	2,183	3,023	3,976	4,353
<i>(G) Shipbuilding :</i>					
Boilermakers	76,042	82,000	90,000	95,872	103,945
Shipwrights	31,048	38,000	41,329	45,309	46,966
Sheet Iron Workers	1,176	700	1,268	—	—
Barge Builders	371	371	416	422	470

¹ For earlier years, see table on pp. 27-8. •

	1916	1917	1918	1919	(Approximate) 1920
(H) Sheet Metal Workers :					
Nat. Amal. Sheet Metal Workers .	11,609	12,500	12,000	12,000	14,000
General Union	2,663	—	3,245	—	3,987
Galvanized Hollow Ware Workers .	1,132	1,080	1,147	1,500	1,690
Birmingham Operative Tin-plate Workers	2,628	—	—	—	3,000
(I) Textile Machinery :					
Spindle and Flyer Makers . .	1,217	1,206	1,216	1,205	1,404
Shuttle Makers	399	534	501	539	591
Mule and Ring Spindle Makers .	171	179	157	344	327
Block, Roller, and Stamp Cutters .	318	291	304	293	358
(K) Miscellaneous :					
Machine, Engine, and Iron Grinders and Glaziers	663	663	645	663	728
Heating and Domestic Engineers .	2,111	4,000	3,944	5,300	6,758

This big growth of Trade Union membership was accompanied by a considerable consolidation of forces. Throughout the war period an increased measure of common action was forced upon the Trade Unions, and especially upon those concerned in the engineering and kindred industries. In one conference and committee after another, the Unions had to enter into joint consultation with the Government and the employers for the settlement of questions which were of common concern. Moreover, a great consolidation of forces was taking place on the side of the employers. Firms previously outside the Employers' Federations joined them in large numbers; and the Federations themselves were linked up into wider combinations, and united centrally in bodies such as the Federation of British Industries.

Full Trade Union co-operation, however, was not smoothly or easily achieved. Throughout the war period there was bickering between the Amalgamated Society of Engineers and the smaller Trade Unions of skilled engineering and shipyard workers. For the greater part of the war period the A.S.E., as well as the smaller Unions, was a member of the Engineering and Ship-building Trades Federation, to which some of the general labour Unions were also affiliated. But the secession of the A.S.E. from the Federation in 1917 in fact only gave formal sanction to a course of independence in action which had been followed for

some time previously. The A.S.E. was by far the largest Union and the most intimately concerned in such questions as dilution ; and its representatives were not prepared to be outvoted by a number of smaller Societies which had a far less membership or were far less affected by the questions at issue. The constitution of the Engineering and Shipbuilding Trades Federation was based on treating all affiliated Unions as equal partners, irrespective of size ; and this fact, combined with the comparatively militant temper of the A.S.E., often made separate action on its part inevitable.

This had the effect of enabling the Government, on several occasions, and especially in connexion with military service and dilution, to play the other Unions off against the A.S.E. But, although this produced at times annoying complications, its practical effect was not very great ; for the strength of the A.S.E. enabled it very largely to determine Trade Union policy in the engineering shops,¹ at least so far as the skilled workers were concerned.

Far more serious, practically, was the sharp cleavage which at times manifested itself between the Unions representing skilled and less skilled workers. As we have seen, the effect of the War was to bring about a vast improvement in the organization of the less skilled, and also greatly to enhance their sense of their own power and importance. The skilled workers' Unions, although under pressure they co-operated in the introduction of dilution, throughout feared the rise of the less skilled, and regarded it as menacing the status in industry which they had succeeded in establishing through their Trade Unions. The less skilled workers' leaders, on the other hand, resented the restrictions imposed by the skilled trades on the right of unapprenticed or less skilled workers to undertake what were regarded as skilled jobs, or to operate particular classes of machines, and had no motive for preserving, or seeking to restore after the War, Trade Union customs which operated largely against the widening of their own opportunities. From the standpoint of the skilled workers, these Trade Union regulations were indispensable protective measures, without which reasonable rates of wages, standards of

¹ Not in the shipyards, where the Boilermakers' Society was the largest and most influential Union.

craftsmanship, and conditions of labour could not be maintained : to the less skilled workers they more often presented themselves as galling restrictions, by which the inferior status of the unapprenticed workman was perpetuated.

There was certainly much to be said, from the side of the less skilled workers, in support of their position. It was undeniable that the skilled workers had regarded the less skilled as inferiors, and had, at any rate through the official Trade Unions, done little to help them to organize for themselves or to win better conditions. The less skilled workers often found themselves flung out of employment by disputes affecting the skilled workers with which they had no concern, but which it was regarded as incumbent upon them, as loyal Trade Unionists, to support.

The skilled workers, on the other hand, could make out a good case for their opinion that their Trade Union* customs restricting the employment of less skilled workers were essential if good wages and conditions were to be maintained, and that the breaking down of these customs, so far from really helping the less skilled workers, would merely bring their wages and conditions tumbling down in the wake of those of the skilled tradesmen. For it was the fact before the War, and is still largely the fact to-day, that the wages and conditions of the less skilled grades are governed by the wages and conditions of the skilled craftsmen. This is obviously the case with many of the grades of semi-skilled machinists ; but it also applies, to a considerable extent, all the way down the industrial scale.

During the war period the industrial importance of the less skilled workers, and with it their legitimate sense of their own consequence, very greatly increased. The skilled workers were suspicious of their advance, and endeavoured to keep the negotiations over the question of dilution as much as possible in their own hands. When the question of organizing the women who were being introduced into the workshops came seriously under consideration in 1915, the A.S.E., after rejecting the proposal that it should itself admit them into its ranks, preferred an alliance with the National Federation of Women Workers to an alliance with the mixed general labour Unions, largely on the grounds that the N.F.W.W. was prepared to give better guarantees as to the restoration of pre-war conditions, and that, organized

apart from the less skilled men, the women were likely to prove less dangerous competitors after the War. The alliance between the A.S.E. and the N.F.W.W. was entered into in June 1915; and in July a circular letter was issued to all districts of the A.S.E., and included the following passage :

The Executive Council draw your attention to the fact that the Workers' Union are claiming to represent the Women Workers in certain districts, and notify you that they do not accept the claims of the W.U., and urge you to assist in every possible way the Federation of Women Workers, which is formed solely of women workers.

As we have seen, this policy did not prove to be completely effective, and, although the N.F.W.W. rose to a membership of 50,000, mostly in the munitions trades, by December 1918 the National Union of General Workers had about 60,000 women workers, and the Workers' Union nearly as many more.

During the years 1915 and 1916 various attempts were made to reach an agreement which would provide a basis for common action between the craft Unions and the mixed general labour Unions. These were resumed, after a breakdown, subsequently to the formation of the National Federation of General Workers in July 1917; but, although at one time agreement seemed to be possible, there was one problem for which no solution could be found. There was no clear line of demarcation parting the skilled and unskilled groups of workers, the one passing almost insensibly into the other through the numerous classes of semi-skilled machinists. The craft Unions sought to organize some, but not all, of these machinists; for the A.S.E. dropped in 1916 its theoretical policy of organizing the unskilled workers—a policy which had never operated to any considerable extent in practice. The line was actually drawn at different points in different districts, according to the varying attitudes of the branches and District Committees. The skilled Unions would not, and could not, give up the attempt to organize any workers who were less than fully skilled; and the general labour Unions, on their side, persisted in organizing many workers whom the craft Unions desired to enrol. A draft agreement, drawn up in 1916 by the A.S.E. and the National Union of General Workers, assigned the fully skilled workers entirely to the former and the unskilled entirely to the latter body, leaving a large sphere in which both were to be allowed to operate. But even this was not enough

for the Workers' Union, and many disputes arose between it and the A.S.E. on the ground of its alleged claim to organize or retain in its ranks workers who belonged definitely to the skilled grades. In more than one case, those disputes actually resulted in small local strikes. Finally, after negotiations between the craft Unions and the National Federation of General Workers in 1917, the attempt to find a clear line of demarcation was abandoned. One cause of the seriousness of the difference lay in the big disparity between the contributions and levies payable to a general labour Union and to a craft Union. The former varied from 3*d.* to 6*d.* per week, and the latter from 1*s.* or 1*s.* 6*d.* to 2*s.* 6*d.* Another cause was the fear of the craftsmen that the general labour Unions, mainly concerned with raising the lower rates of wages paid to the less skilled grades, would not be adequately solicitous for the absolute insistence on 'district rates' in the case of skilled men. The enrolment of the more skilled grades of workers in general labour Unions was held to result in 'under-cutting'.

While this big problem of demarcation of membership remained unsettled, and the advance of dilution served to stir up further disputes, effective common action was very difficult. More than once, when the skilled workers were resisting some measure proposed by the Government, such as the taking of skilled men for military service, the introduction of 'dilution on commercial work', or the extension of 'payment by results', the general labour Unions, whose attitude on all these questions was fundamentally different from that of the skilled workers, were found siding with the Government, and urging their members to remain at work, and 'carry on', when strikes broke out or were threatened. Dilution meant, for the less skilled, increased opportunities for higher earnings and an improved status in industry. Sympathy for the claims of skilled men for exemption from military service was hardly to be expected from classes upon which the claims of the army fell all the more heavily because of the exemptions. 'Payment by results' had, for the less skilled, no such threatening aspect as for the skilled workers, because the former had no corresponding valuable Trade Union regulations to be menaced by it, and it seemed therefore to promise higher earnings without loss or sacrifice. Moreover, it is, generally speaking, far easier to lay down approximately equitable piece-work prices for semi-skilled repetitive machine operations than for fully skilled work.

The difference of point of view on all these questions was, however, largely tempered in practice by the sense of Trade Union solidarity. In the shop stewards' movement, and in workshop organization generally, there was a growing tendency for skilled and less skilled to act together,¹ and, when the War at last came to an end, it was soon evident that its effect had been to increase the capacity of the various sections for common action. The military service problem, of course, disappeared. The dilution problem, in the form of the 'machine question', and the problem of 'payment by results' remained unsettled, and led to some further differences during 1919 and 1920. In the former year the employers, resuming the attempt which they had been compelled to abandon in 1917, came forward with a demand for the general acceptance of 'payment by results'. This was rejected on a ballot vote by the skilled workers, but accepted by the less skilled, whose representatives signed an agreement with the employers laying down the terms and conditions on which systems of 'payment by results' might be generally introduced. But, on the wages question, which was the outstanding issue in 1920 and 1921, skilled and less skilled worked in the main together, and the prospects of an increasing co-operation between the two groups seem to be good.

To some extent the problem has been simplified by the much closer concentration of Trade Union forces which has been brought about. Under the British law, Trade Unions, up to 1917, could not amalgamate unless, on a ballot vote, each of the Unions secured a two-thirds majority, not merely of those voting, but of its whole membership. An amending measure, the Trade Union (Amalgamation) Act, became law on the 10th July 1917, and under this the required proportion was reduced to a majority of 20 per cent. on a total vote of not less than 50 per cent. of the members. Even this provision, however, was sufficiently drastic to make amalgamations very difficult during the actual years of war, with many men away with the Forces and many more working away from their own trades and districts, so that the ballot papers could hardly be got to them, or at least votes recorded with any real knowledge of the position.

Accordingly, though the need for amalgamation was widely

¹ See the companion study of *Workshop Organization* in this series.

recognized during the War, most of the Unions had to defer the actual consummation of amalgamation schemes until after its conclusion, and to content themselves with preliminary working arrangements, Federations, and similar half-way measures. The very numerous amalgamations which took place in 1919 and 1920, and the many more which are still being completed, are, to a great extent, the continuation of steps which were taken during the war period.

The extent of the changes due to these amalgamations can be readily conveyed by a few instances taken from the groups of Unions which have been principally under discussion in this book. Let us take first the case of the less skilled workers. In 1914 there were ten important Societies organizing general workers. Now, in 1921, the number has virtually been reduced to four, and these are closely combined in a single inclusive Federation, and are likely, in the near future, to accomplish further amalgamations.

GENERAL LABOUR UNIONS

Progress of Amalgamation, 1914-21

Unions existing in 1914

Unions remaining in 1921, with approximate membership

National Union of General Workers	}	National Union of General Workers. (520,000.)	} All these, with certain other Societies, are now federated in the <i>National Federation of General Workers.</i> (1,500,000.)	
National Federation of Women Workers				
National Union of Machine and General Labour				
British Labour Amalgamation Gas, Municipal, and General Workers' Union				
Workers' Union	}	These three Unions are still distinct, but were in 1919 closely confederated with common organization as the <i>National Amalgamated Workers' Union.</i> (730,000.)		
National Amalgamated Union of Labour				
Municipal Employees' Association				
	}	Amalgamated in 1921 with a number of other Unions of transport workers into the <i>Transport and General Workers' Union</i> , which has a 'general labour' section of about 70,000 members.		
Dock, Wharf, Riverside, and General Workers' Union				
Irish Transport and General Workers' Union		Irish Transport and General Workers' Union. (150,000.)		

In 1921-2 an attempt was made to amalgamate the National Union of General Workers and the National Amalgamated Workers' Union into a single body. This has broken down; but the National Union of General Workers, the National Amalgamated Union of Labour, and the Municipal Employees' Association are joining forces from January 1923, leaving the Workers' Union still separate.

A similar process of consolidation has been at work among the Unions of skilled workers, as the following table shows :

ENGINEERING, FOUNDRY, AND SHIPYARD TRADE UNIONS

Progress of Amalgamation, 1914-21

<i>Principal Unions Existing in 1914 ¹</i>	<i>Unions remaining in 1921</i>	<i>Approximate membership, 1920</i>
Amalgamated Society of Engineers Steam Engine Makers' Society Amalgamated Society of Tool- makers United Machine Workers' Asso- ciation Amalgamated Instrument Makers' Association Smiths' and Strikers' Society	Amalgamated Engineering Union	450,000
National Society of Brassworkers United Patternmakers' Association Electrical Trades Union	National Society of Brassworkers United Patternmakers' Association Electrical Trades Union	32,000 12,000 57,000
Friendly Society of Ironfounders Amalgamated Society of Core- makers Associated Ironmoulders of Scot- land	National Union of Foundry Workers	50,000
Central Ironmoulders' Association United Society of Boilermakers Shipwrights' Association Associated Blacksmiths' Society	Central Ironmoulders' Association United Society of Boilermakers Shipwrights' Association Associated Blacksmiths' Society	7,000 100,000 45,000 25,000
Amalgamated Sheet Metal Workers and Braziers General Union of Braziers and Sheet Metal Workers	National Union of Sheet Metal Workers	14,000

¹ For the pre-war membership of these Unions, see table on pp. 27-8.

In addition to the Unions mentioned above, a number of small Societies have been absorbed into the larger Unions mentioned. Most of the above Societies, with the exception of the Amalgamated Engineering Union, are still affiliated to the Engineering and

Shipbuilding Trades Federation, with which the A.E.U. now usually takes joint action on questions of common concern.

Amalgamation has also made progress in other trades connected with engineering work. The two rival Unions of Carpenters and Joiners have united to form the Amalgamated Society of Woodworkers, which had 167,000 members at the end of 1920. The two principal Societies of coachmakers have formed the National Union of Vehicle Builders, with 27,000 members. Throughout the world of Trade Unionism there was a similar movement of consolidation, parallel with an at least equally important movement on the side of the employers.

When the War ended in November 1918, it seemed for a time that its result had been a very great accession of strength to the Trade Union movement. Practically every important Union came forward in 1919 with an ambitious programme of demands, including in some measure a positive transformation of the industrial system. Substantial concessions were made to many Unions in 1919; but in 1920 the resistance of the employers and of the Government to Trade Union claims became much more determined, and, with the growth of unemployment in the autumn of that year, the Unions passed definitely from aggression to defence. Reductions in wages and worsening of conditions began to be widely enforced in the spring of 1921, and, at the time of writing, the reverse movement to that of 1919 has culminated in the national engineering lock-out of 1922. It is being realized to what an extent the Unions, however strong numerically they may be, are in their pursuit of reforms within the capitalist system, at the mercy of trade fluctuations. A decline in membership has already resulted from the depression; but it is not yet possible to forecast the extent to which the gains of the war period will be swept away. No one, however, anticipates that more than a fraction of the members gained between 1914 and 1918 will be lost, or that the closer co-ordination of Trade Union—as well as of employers'—organizations which has come about will not be permanently retained.

CHAPTER XIV

CONCLUSIONS

HE who attempts to-day to write the history of the war period, or of any aspect of it, can only escape the danger of being a bad historian by consenting to be little more than a chronicler. For it is impossible for us, who have barely escaped out of the war conditions, to interpret aright the significance of war-time developments, or to attain to the right perspective or selection of outstanding movements and events. We see already how often actually contemporary comment misunderstood both facts and tendencies, and we are apt, where we see this, to react too far towards opposite interpretations. It will not be possible, for some time to come, to pass definite judgement on the effects of the war on Labour as a whole, or upon the relations between skilled and less skilled workers.

Any except the broadest and most obvious conclusions attaching to this chronicle are therefore necessarily tentative, and may easily be shown, at a later stage, to be largely wrong. The writer was, through practically the whole of the war period, actively engaged, on the Trade Union side, in administrative and negotiating work closely connected with every development of Labour policy in the munitions industries. It was his business to watch from the outset the progress of dilution, and to play a part in drafting and administering the numerous agreements by which it was regulated. Doubtless this personal experience has coloured his whole view ; but it is at least the case that these particular developments with which he was concerned were the central and essential movements affecting the relations between workers of different grades of skill. The writer played his part in these developments as the servant of the most powerful group of skilled workers ; and this too may have coloured his attitude, and caused him to take too external a view of the less skilled workers' movement. He has endeavoured, all the more for this

reason, to write as objectively as possible, and to treat all sections fairly ; but it is quite possible that he has not succeeded.

The total number of workers employed in the engineering and foundry trades—the central group of the munitions industries—rose, during the war, from 811,000 to 1,386,000, according to the figures compiled for the purpose of Unemployment Insurance. Inevitably, this increase consisted almost wholly of less skilled workers ; for the number of skilled workers available for recall to the trade from retirement or from other occupations upon which they had entered was very small. The expansion of the industry caused a concentration of the skilled workers upon the most highly skilled types of work, and a widespread ‘up-grading’ of the semi-skilled workers already engaged in it to work of a more skilled character. The workers brought in from outside naturally started as a rule on the least skilled types of work, and the men previously engaged on these were shifted up. This process of shifting continued throughout the war period, so that not a few of the new entrants to the munitions industries rose to positions requiring considerable skill, often by a series of ‘up-gradings’ from job to job.

This, however, is only one aspect of the process. It was not simply that, as the industries expanded, there was more room for promotions. Military demands made, from 1916 onwards, an increasingly heavy drain on the man power even of the munitions industries. Men who had entered the industry and risen some distance up the scale of skill were called up, and new entrants from outside were always coming in to fill their places. Thus, apart from normal wastage, the number of men who, at one stage or another, entered the munitions industries and acquired some degree of skill or dexterity in the manipulation of machines was very far in excess of the total increase in the male personnel of the industry, even when all the regular engineering workers in the army have been added to the total number of men employed in the industry in 1918.

As we have seen, the operation of the Military Service Acts caused a restriction of the flow of male labour into the munitions industries, and resulted in an increase in the employment of women on the more skilled, and also on the heavier, types of work.

At no time, however, was the flow of male entrants altogether stopped ; for a thin but growing stream of Army Reserve Munition Workers and other medically unfit men flowed into the munitions industries during 1917 and 1918.

Thus, even apart from women's labour, there was at the end of the War a vastly increased supply of male workers with some knowledge of machine processes in the metal industries, and a considerably increased number with experience of the more skilled types of operation. The majority of the women who entered the munition factories acquired only a very limited experience of a few highly specialized operations ; but a considerable number became accustomed to semi-skilled operations, and not a few to certain types of skilled work, such as welding and scientific instrument making.

It is, therefore, safe to say that if, after the War, the engineering and kindred industries, reverting to their pre-war types of production, had been called upon to maintain double their pre-war output, no difficulty would have been experienced in doing this, except during the actual period of the 'change-over' from war to peace production.

In fact, of course, so far from being called upon to do this, those responsible for the conduct of these industries speedily encountered the serious difficulty of marketing, under the exhausted financial conditions of the post-war world, anything like their pre-war output of commodities. The great mass of the less skilled labour which had entered these forms of production during the war therefore again flowed out of them, and sought re-employment either in the occupations from which it had been originally drawn or on the general labour market. The supply of women's labour was, of course, also largely reduced by marriage or by the return of husbands from military service.

The new conditions were not such as to favour large new industrial experiments. A study of industrial history serves to show that rapid changes in the evolution of labour as applied to the forms and methods of production take place at periods of rapidly expanding demand. The huge expansion of non-economic demand during the war period produced an abnormally rapid, but also artificial, transformation of productive forces. This

inflated demand, however, could not be maintained, because the economic system not only had not been adapted to absorb a largely increased flow of commodities, but had suffered positive contraction in its capacity owing to war exhaustion and the perpetuation of the war mentality into the peace settlement.

Accordingly, the expansion of productive power, and the corresponding changes in the division and classification of labour as a factor in production, which were the results of war demand, did not form the foundation at once of a new capitalist era of mass production and increased specialization of labour. A rapid reversion to 'pre-war practices' occurred, and, much to their surprise, the Trade Unions of skilled workers found most of their suspended rules and customs restored to them almost without opposition on the part of the employers. The mechanism which enabled society to absorb, at the cost of immediately destroying them, an immensely increased quantity of goods was a purely temporary erection, based on universal inflation; and, such a mechanism being quite unfitted to survive the return of conditions under which economic factors were again allowed to operate, a rapid reversion, exaggerated by the forms of inflation itself, took place and industry was contracted within less than its pre-war limits.

During the War it was repeatedly prophesied that the era of mass production had begun, and that the old lines of division between skilled and less skilled workers would never be re-established. It was pointed out that the pre-war evolution of industry had been in these directions, that the conditions of war-time production had immensely speeded up the operation of forces which were already at work, and that the course of development, although it was abnormally rapid, was otherwise precisely in accordance with expectations. These arguments were common to men and women of many different schools of thought. They were advanced by employers anxious to develop mass-production methods and to cut wages costs by an increased employment of the less skilled grades of labour on repetition work. Still more were they urged by 'efficiency engineers' and students of scientific management, who saw in them a progressive assimilation of British industrial conditions to those of the

United States. 'Industrial Unionists', demanding Union organization on 'class' lines, 'without distinction of sex, grade, or skill', interpreted the war-time changes as the fulfilment of Marxian forecasts of industrial evolution, and as preparing the way for socialization by increasing the concentration of capitalist production. Writers like Mr. Sidney Webb¹ accepted these arguments, coming from so many diverse sources, as true, and urged the Trade Unions, instead of attempting the impossible task of restoring obsolete or obsolescent customs, to negotiate with the employers a new charter of minimum labour conditions, in return for which all 'restrictions on output' and similar Trade Union regulations should be waived for the future.

As I pointed out at the time,² these commentators were in too much of a hurry. They were perfectly correct in recognizing the war developments as merely hastening a process of capitalist development which was already in progress long before 1914; but they were wrong in supposing that a wholly abnormal stimulation such as that which a number of industries experienced during the War would retain its force when the abnormal influence was withdrawn and would not be followed by an almost equivalent relapse. They made the error which is characteristic of the economic historian when he seeks to apply the conclusions which he draws from the broad movements of historical evolution to the circumstances of the hour, of ante-dating the course of development and diagnosing, on the discovery of an expected symptom, the presence of an expected crisis, without pausing to consider whether the symptom was not the result of an abnormal and temporary influence.

In the long run, if the capitalist system in industry continues to operate, the prophecies of the 'efficiency engineers', the Marxian Industrial Unionists, the employers, and Mr. Sidney Webb will probably be verified. Industry will follow the course of evolution which they anticipate, and the setback of the post-war years will be followed by a gradual return to many of the

¹ See his 'Restoration of Trade Union Conditions', which originally appeared as a series of articles in *The Times*.

² See my chapter on Trade Union Regulations in the first edition of *Self-Government in Industry* (1917). The chapter is omitted from subsequent editions.

practices adopted during the war period. But the development will be far more gradual, and, for that very reason, its conquests will be more stable.

This, however, is true only on the assumption of a survival of the present industrial order; and such a survival, for any considerable period, seems to depend on the finding by capitalism of means of promoting an increased consumption and distribution of commodities. The productive forces are ready to be unloosed; but they cannot be unchained until there is a means of utilizing the energy which they can command. Not production but distribution is, for Great Britain and other developed industrial countries, the pressing problem of economics.

Even a greatly changed, or totally inverted, economic system would, no doubt, advance towards a progressive re-utilization of many of the productive methods adopted during the War. But its line of development is far more difficult to forecast, and there is no need to attempt such a forecast here.

If we assume the continuance of an order of production that is capitalistic, it is clear that its re-employment of mass-production methods will take place under conditions widely different from those of the war period. The economic factor—cost of production—was, or was increasingly treated, as an important factor in the consideration of new methods during the war period; but it was never the primary factor. Munitions of war *had* to be produced. If they could be produced cheaply, so much the better; but, however high the cost might be, the main thing was to produce munitions in the greatest possible quantities. This may not have been altogether true of the last year of the War, when the problem of quantity production had been largely solved, and, in face of financial stringency, economies in production were beginning to count for something even in the Ministry of Munitions; but for the greater part of the war period its truth can hardly be denied.

The process of dilution, therefore, was often carried through with very little regard for relative costs of production. The test of a new method lay rather in its capacity to produce a higher output than in its effect on the problem of cost. When a process had been introduced, or a fresh class of workers substituted, efforts

were subsequently made to bring costs down ; but the economic consideration remained, as a rule, secondary.

Consequently, there can be little doubt that many processes were widely adopted during the war period which, in any commercial sense, were not a 'paying proposition'. There is an extraordinary conflict of evidence, which no published statistics are available to resolve, on this point. When, for example, the War Cabinet Committee on Women in Industry¹ set itself, in 1918, to collect the evidence concerning the economic aspects of the increased employment of women, they found large bodies of evidence both for and against the thesis that women's labour 'paid', even when the considerably lower wage rates paid to women workers were taken fully into account. General impressions on this point, either of employers or of Trade Unionists or of propagandist women's bodies such as the Women's Engineering Society or the Women's Industrial League, had, of course, no statistical value ; for the only evidence on which conclusions could be based at all would be an analysis of results on particular processes.²

Even evidence as to particular processes, however, often furnishes no adequate basis for a conclusion ; for much depends, not only on the nature of the processes on which women or less skilled workers were employed, but also on the manner and conditions of their employment. The factory, except perhaps in the textile industries, is on the whole a man-made institution made, not only by men, but also for men. Over by far the greater part of the munitions industries, factory buildings, machines, rules and regulations, and hours and conditions of labour have all been designed mainly with a view to the employment of men.

During the first part of the War especially, dilution and substitution usually took the form of simply replacing one class of labour by another on identical processes and machines and in identical surroundings. Even where new factories were built, or new plant installed, specifically for women, the form, design,

¹ See p. 185.

² See, for some evidence on this point, the Reports of the Health of Munition Workers' Committee.

and methods of operation were mainly influenced by traditions made by men for men. This was one of the factors hindering output to which the Health of Munition Workers' Committee, and later the Industrial Fatigue Research Board, drew special attention. It was very often difficult, if not impossible, to make employers realize the need, where women were employed, of making any special provision for them, and decent lavatory accommodation, canteens, first aid centres, and rest rooms were only developed very gradually and imperfectly, under strong pressure from the Welfare Department of the Ministry of Munitions, and often with results whose value was destroyed because employers could not get away from the attempt to apply directly commercial standards to 'Welfare Work'.

Even the need for adapting the machinery itself to women's physique was only realized very slowly, and many make-shifts were tried before many employers would make reasonable provision even in a matter so obviously essential to high output or low cost of production. This unwillingness of employers to adapt factory conditions to the needs of women—largely, no doubt, the result of a sub-conscious feeling that the women ought not to be there at all, and of an instinctive resistance to changes in established routine which might—and did in fact—prove unsettling to the male workers—inevitably affected in a considerable degree the relative productivity of men's and women's labour. In the case of less skilled men, the same influences operated only to an insignificant extent.

Women's labour, therefore, especially during the earlier period of the War, usually failed to get quite a fair chance. The provision for women's special needs greatly improved in 1917 and 1918; but to the end women had to contend with the strong feeling, largely shared by the employer and the male workers, that they had no business to be in the factories at all. Their failures therefore produced a far greater psychological impression than their successes; and failures which were the fault of the management or of the skilled supervision were readily attributed to them.

To some extent, these disadvantages were offset by the advocacy of the women's Societies, and by the enthusiasm of some

employers who believed that they had discovered a new and inexhaustible supply of labour which would rid them of the 'tyranny of Trade Unions'. Plans were mooted for factories to be staffed entirely by women after the War, and these factories were to give a demonstration of the possibilities of production when there were no 'restrictions on output' imposed by Trade Unionists. Unfavourable post-war conditions, however, killed these projects; and the suspicion of women's labour reasserted itself, and retained its hold over most employers, and probably over most male workers as well.

This does not mean that women's labour will not be re-introduced in the future on a considerable scale; but it does mean that any re-introduction is likely to be gradual and experimental. The huge experiment of war-time production has not furnished any convincing data either for or against the value of women's labour. It has shown, indeed, that for its proper utilization certain increased charges for supervision and adaptation of factory plant and methods must be incurred; but of these only supervision need be a standing charge, and it is 'not proven' how far this can be compensated for by higher output or greater docility.

A vital factor is, of course, the level of women's wages. Women were, as a rule, paid considerably less than men during the War, even on identical jobs, and were often paid less for identical amounts of work on systems of 'payment by results'. But women's wages were only raised to the standards actually reached by persistent Trade Union effort, and in face of a chorus of complaints that they were being paid 'more than they were worth'. The meaning of this phrase usually dissolved under analysis into a number of disparate ideas. It was urged that women's wages were excessive in relation to men's when the relative inclusive costs of production to the employer were taken into account—a conclusion which it was almost impossible to check, as the Women's Special Arbitration Tribunal found in the many hundreds of cases which it was called upon to investigate. It was also urged—and there is no doubt that this was the dominant idea in the minds of both employers and Government officials—that women's wages in the munitions trades were in

excess of those paid to women in other industries, the average of which was regarded as the 'economic level', although it was manifestly governed more by customary than by economic considerations. The regulation by law of wages in the munitions trades ceased with the final expiry of the Wages (Temporary Regulation) Act in 1920. A period of falling wages then set in, and clearly the future level of women's wages, however it may be determined, will largely influence women's prospects of re-employment in occupations which they entered during the War. But, important as this factor is, it will probably continue for some time to be secondary to the psychological objection felt by many employers and Trade Unionists to the factory employment of women under any conditions.

These considerations do not apply to the employment of less skilled grades of male labour on work previously done by skilled men, and it is probable that, when conditions become more favourable to changes in productive methods, the employers will be far more ready to attempt the increasing of the proportion of less skilled to skilled men than to undertake the more extensive reorganizations necessary for the successful employment of women on new processes. Many skilled Trade Unionists, feeling this to be the case, greatly preferred the introduction of women under dilution schemes, even at lower wage rates, to that of less skilled men, because they held and felt that women were likely to be less powerful competitors after the War. Resistance from the skilled workers' Trade Unions to attempts to substitute less skilled for skilled men is to be anticipated to much the same extent as if there had been no war, but with the very important difference that, both absolutely and relatively, the strength of the less skilled workers' organizations has been very greatly increased. The position would, of course, be greatly changed if the 'Industrial Unionists' got their way, and skilled and less skilled were effectively combined in a single organization based on the principle of 'Union by Industry'; but of this there is no immediate sign, although a better understanding between these groups of organized wage earners is clearly indispensable if Trade Unionism in the metal industries is to become capable of developing a concerted policy, or of exerting its full strength in the

interests of its whole membership. The ambitions of the workers for 'control in industry', in particular, are clearly realizable only on the basis of a reconciliation of interests and points of view among the various groups of producers, based on a common attitude to the 'machine question', which is, in little, what the whole problem of factory control is in a larger sense.

APPENDIX A

PROVISIONS FOR AVOIDING DISPUTES

(York Memorandum)

MEMO. of Special Conference between the Engineering Employers' Federation and the Amalgamated Society of Engineers held within Station Hotel, York, on 17th April 1914.

Referring to the termination by the Society of the agreement of 1st October 1907, and the premium bonus agreement, the representatives of the Society agree to forthwith recommend their members to authorize their Executive Council to enter into negotiations with the Federation with the view to arriving at an agreement in substitution of the agreement of 1907 and the premium bonus agreement, and both parties agree that meantime the following provisions for avoiding disputes shall be observed:

When a question arises an endeavour shall be made by the management and the workmen directly concerned to settle the same in the works or at the place where the question has arisen. Failing settlement, deputations of workmen, who may be accompanied by their organizing district delegate (in which event a representative of the employers' association shall also be present) shall be received by the employers by appointment without unreasonable delay for the mutual discussion of any question in the settlement of which both parties are directly concerned. In the event of no settlement being arrived at, it shall be competent for either party to bring the question before a local conference to be held between the local association and the local representatives of the Society.

In the event of either party desiring to raise any question a local conference for this purpose may be arranged by application to the secretary of the local association or to the local representative of the Society.

Local conferences shall be held within seven working days, unless otherwise mutually agreed upon, from the receipt of the application by the secretary of the local association, or the local representative of the Society.

Failing settlement at a local conference of any question brought before it, it shall be competent for either party to refer the matter to a Central Conference, which, if thought desirable, may make a joint recommendation to the constituent bodies.

Central Conferences shall be held on the second Friday of each month, at which questions referred to Central Conference prior to fourteen days of that date shall be taken.

Until the procedure provided above has been carried through, there shall be no stoppage of work, either of a partial or a general character.

**The Engineering Employers'
Federation :**

**HENRY LAWTON, Chairman.
ALLAN M. SMITH, Secretary.**

**The Amalgamated Society of
Engineers :**

**J. T. BROWNLIE, Chairman.
ROBERT YOUNG, Secretary.**

APPENDIX B

A DIGEST OF THE PROVISIONS RELATING TO LABOUR
CONTAINED IN THE MUNITIONS OF WAR ACTS, 1915-1918¹

BY HENRY H. SLESSER, Barrister-at-Law

The references, save where otherwise stated, are to the principal Act, the Munitions of War Act, 1915. The Munitions of War (Amendment) Act, 1916, is referred to as the 'Amendment Act, 1916'. The Munitions of War (Amendment) Act, 1917, is referred to as the 'Amendment Act, 1917'.

M.A.R. signifies English Munition Appeal Reports.

S.M.A.R. signifies Scottish Munition Appeal Reports.

THE MUNITIONS OF WAR ACT, 1915 (AS AMENDED)

(5 and 6 Geo. 5, ch. 54)

PART I (~~Repealed~~ November 21st, 1918)

SETTLEMENT OF LABOUR DIFFERENCES

1.—(1) If any difference exists or is apprehended between any employer and persons employed, or between any two or more classes of persons employed, and the 'difference is one to which this Part of this Act applies', that difference, if not determined by the parties directly concerned or their representatives or under existing agreements, may be reported to the Minister of Labour, by or on behalf of either party to the difference (or by or on behalf of any Government Department), and the decision of the Minister of Labour as to whether a difference has been so reported to him or not, and as to the time at which a difference has been so reported, shall be conclusive for all purposes.

'Difference to which this Part of the Act applies.' This is defined by section 3 of the principal Act as amended by section 9 (2) of the Amendment Act, 1916.

'The Minister of Labour' is substituted for the Board of Trade by sections 1 and 2 of the Ministers and Secretaries Act, 1916.

'Difference.'—A 'difference' between an employer and persons employed arises when it is first apprehended, and, where it exists, neither masters nor workmen have any right to make any change in the matter of the difference without first making application to the Ministry of Labour.—*George v. Larne Shipbuilding Company, II, M.A.R. (Ireland), p. 82.* (See also *Foster v. Bolton, II, M.A.R., p. 57.*)

'or by any Government Department.' The words in brackets are inserted by section 6 (2) of the Amendment Act, 1917, *infra*.

(2) The Minister of Labour shall consider any difference so reported, and take any steps which seem to him expedient to promote a settlement of the difference, and, in any case in which he thinks fit, may (and in the

¹ Reprinted, with the permission of the Labour Research Department, from the *Labour Year Book* of 1919.

case where the difference is a difference between an employer and persons employed which appears to the Minister of Labour a bona-fide difference, and which the Minister of Labour has failed to settle by such steps as aforesaid, shall within 21 days from the date of report) refer the matter for settlement either in accordance with the provisions of the First Schedule to this Act, or, if in his opinion suitable means for settlement already exist in pursuance of any agreement between employers and persons employed, for settlement in accordance with those means.

'and in the case,' &c. The words in brackets are inserted by section 2 of the Amendment Act, 1916.

(8) Where a matter is referred under the last foregoing sub-section for settlement otherwise than in accordance with the provisions of the First Schedule to this Act, and the settlement is in the opinion of the Minister of Labour unduly delayed, the Minister may annul the reference and substitute therefor a reference in accordance with the provisions of the said schedule.

(4) The award on any such settlement shall be binding both on employers and employed, and may be retrospective, and if any employer or person employed thereafter acts in contravention of, or fails to comply with, the award, he shall be guilty of an offence under this Act.

As to the penalty see Section 14 (a).

As to special arbitration tribunals in matters affecting female workers, see Amendment Act, 1916, Section 6; in matters affecting semi-skilled workers, see Amendment Act, 1916, Section 7.

By Section 6 of the Amendment Act, 1917 : (1) The Minister of Labour may make regulations with respect to the reporting of differences under Section 1 of the Munitions of War Act, 1915, and with a view to preventing undue delay in negotiations for settling such differences may by those regulations prescribe the time within which any such difference is to be reported to him.

(2) A difference may be reported under Sub-section (1) of Section 1 of the Munitions of War Act, 1915, by or on behalf of any Government Department; and accordingly in that Sub-section after the words 'by or on behalf of either party to the difference' there shall be inserted the words 'or by or on behalf of any Government Department'.

PROHIBITION OF LOCK-OUTS AND STRIKES IN CERTAIN CASES

2.—(1) An employer shall not declare, cause, or take part in a 'lock-out', and a person employed shall not take part in a 'strike', in connection with any difference to which this part of this Act applies, unless the difference has been reported to the Minister of Labour, and 21 days have elapsed since the date of the report, and the difference has not during that time been referred by the Minister of Labour for settlement in accordance with this Act.

For definition of 'lock-out' and 'strike' see Sec. 19.

(2) If any person acts in contravention of this section he shall be guilty of an offence under this Act.

As to penalty, see Sec. 14 (b) and (c).

By Section 21 of the Amendment Act, 1916 : For the purposes of proceedings under Section 2 of the principal Act, a certificate of the Board of Trade purporting to be signed by the President or a Secretary or Assistant Secretary of the Board of Trade, or by a person authorised for the purpose by the President, that a difference to which Part I of the principal Act applies has or has not been reported to the Board, and, in cases where such a difference has been reported, as to the date on which it was reported, shall be admissible as evidence of the facts therein stated.

DIFFERENCES TO WHICH PART I APPLIES

3.—The differences to which this part of this Act applies are differences as to rates of wages, hours of work, or otherwise as to terms or conditions of or affecting employment on (or 'in connection with' 'munitions work'), and also any differences as to rates of wages, hours of work, or otherwise as to terms or conditions of or affecting employment on or in connection with any other work of any description, if this part of this Act is applied to such a difference by his Majesty by proclamation on the ground that, in the opinion of his Majesty, the existence or continuance of the difference is directly or indirectly prejudicial to the manufacture, transport, or supply of munitions of war.

As amended by Amendment Act, 1916, Sec. 9 (2).

This part of this Act may be so applied to such a difference at any time, whether a lock-out or strike is in existence in connection with the difference to which it is applied or not.

Provided that, if, in the case of any industry, the Minister of Munitions is satisfied that effective means exist to secure the settlement without stoppage of any difference arising on work other than on munitions work, no proclamation shall be made under this section with respect to any such difference.

When this part of this Act is applied to any difference concerning work other than munitions work the conditions of labour and the remuneration thereof prevailing before the difference arose shall be continued until the said difference is settled in accordance with the provisions of this part of this Act.

'In connection with' Carters employed carting raw material into and manufactured munitions out of a controlled establishment are employed 'in connection with' munitions work, and a strike among them is illegal. (*Preston v. Knox*, S.M.A.R., p. 39.)

'Munitions work.' Defined in section 9 of the Amendment Act, 1916 ; see section 7 hereof.

By Section 5 of the Amendment Act, 1917 : (1) Where an award as to a change in the rate of wages payable to persons engaged on or in connection with munitions work, or as to hours of work or otherwise as to terms or conditions of, or affecting

employment of, persons so engaged, has been made either under Part I of the Munitions of War Act, 1915, or in pursuance of an agreement between representatives of employers and workmen, and the Minister of Munitions is satisfied that the award is binding upon employers employing the majority of the persons engaged on or in connection with munitions work in any trade or branch of a trade either generally or in a particular district, the Minister of Munitions may by order direct that the award shall be binding on all or any other employers and persons so engaged, either without modifications or subject in any particular cases to such modifications contained in the direction as the Minister may consider necessary to adapt the award to the circumstances of such cases, and in particular in order that no such other employer shall be enabled to pay less wages than are payable in the like circumstances by employers who were originally bound by the award.

(2) Where any such directions are given the award shall be binding not only on the employers and persons so engaged who are affected by the award as originally made, but also, subject to such modifications (if any) as aforesaid, on the other employers and persons so engaged to whom the directions relate, and any contravention thereof or non-compliance therewith shall be punishable in like manner as if the award and the order in which such directions are contained were an award made in settlement of a difference under Part I of the Munitions of War Act, 1915, and had been made in respect of a dispute affecting such employers and persons so engaged.

Section 1 of the Amendment Act, 1917, provides that : (1) If at any time during the continuance of the present War the Minister of Munitions considers it necessary, in order to maintain the output of munitions, that directions should be given with respect to the remuneration to be paid for work (being munitions work or work in connection therewith or work in any controlled establishment), which at the time when the directions are given is paid at time rates, he may, subject always and without prejudice to any agreement made between employers and workmen with the consent of the Minister with respect to the remuneration of such work, by Order give such directions as he may consider necessary for the purpose of the maintenance or increase of output.

(2) Any contravention of or non-compliance with any such directions shall be punishable in like manner as if the Order in which the directions are contained was an award made in settlement of a difference under Part I of the Munitions of War Act, 1915, but where a difference has arisen respecting matters on which the Minister of Munitions has given directions under this Section the difference shall be referred to a special arbitration tribunal constituted under Section 8 of the Munitions of War (Amendment) Act, 1916.

(3) Any directions given under this Section may be varied from time to time. but shall not continue in force after the termination of the present War.

PART II

CONTROLLED ESTABLISHMENTS

4. If the Minister of Munitions considers it expedient for the purpose of the successful prosecution of the War that any establishment in which munitions work is carried on should be subject to the special provisions as to limitation of employers' profits and control of persons employed, and other matters contained in this section, he may make an Order

declaring that establishment to be a controlled establishment, and on such Order being made the following provisions shall apply thereto :—

‘ Minister of Munitions.’ See Ministry of Munitions Act, 1915.

‘ Considers it expedient.’

An order, once made, may continue to operate after the war as long as the Act is in force. (See ‘ Restoration of Trade Union Customs ’, by G. D. H. Cole and H. H. Slessor ; J. S. Middleton, 33 Eccleston Square, S.W. 1, pp. 8 and 9.)

By Section 1 of the Amendment Act, 1916 : The Minister of Munitions may by Order declare any establishment or establishments belonging to or under the control of his Majesty or any Government Department in which munitions work is carried on to be a controlled establishment or controlled establishments as the case may be, and thereupon the provisions of the Munitions of War Act, 1915, and that Act relating to controlled establishments shall apply to such an establishment or establishments, subject to such modifications and exceptions necessary to adapt those provisions to such an establishment or establishments as may be specified in such an Order.

(1) Any excess of the net profits of the controlled establishment over the amount divisible under this Act, as ascertained in accordance with the provisions of this Act, shall be paid into the Exchequer.

See Excess Profits Rules Order, September 15th, 1915.

(2) Any proposal for any change in the rate of wages, salary, or other emoluments of any class of persons employed in the establishment, or of any persons engaged in the management or the direction of the establishment (‘ other than a change ’ for giving effect to any Government conditions as to fair wages or to any agreement between the owner of the establishment and the workmen which was made before the twenty-third day of June, nineteen hundred and fifteen) (or to any agreement existing before the establishment became a controlled establishment between the owner of the establishment and an employee with regard to any periodical increase of remuneration) shall be submitted to the Minister of Munitions, who may withhold his consent within fourteen days of the date of the submission.

‘ Other than a change.’ Apparently a change to give effect to Government Conditions as to fair wages is permissible without leave. (*Mullins v. L. B. & S. C. R.* ; I, M.A.R., p. 178. *Cook v. Haslam Foundry Company*, II, M.A.R., p. 8.)

‘ May withhold.’ The consent of the Minister is withheld when it is not given within 14 days. (*Morris v. Rudge Whitworth, Limited*, II, M.A.R., p. 107.)

The words in brackets are inserted by Section II of the Amendment Act, 1916.

Provided that if the Minister of Munitions so directs, or if the Minister’s consent is withheld and the persons proposing the change so require, the matter shall be referred for settlement in accordance with the provisions of the First Schedule to this Act, and the consent of the arbitration tribunal, if given, shall in that case have the same effect as the consent of the Minister of Munitions.

If the owner of the establishment or any contractor or sub-contractor employing labour therein makes any such change, or attempts to make any such change, without submitting the proposal for the change to the Minister of Munitions or when the consent of the Minister has been withheld, he shall be guilty of an offence under this Act.

As to penalty see Sec. 14 (e).

(3) Any 'rule, practice, or custom not having the force of law which tends to restrict production or employment' shall be suspended in the establishment, and if any person induces or attempts to induce any other person (whether any particular person or generally) 'to comply, or continue to comply, with such a rule', practice, or custom, that person 'shall be guilty of an offence' under this Act.

'rule which tends to restrict employment.'

A rule which limits the class of people who can be employed or limits the number of people without reference to a particular species who can be employed may be a rule restricting employment. (Per Atkin J. in *Guillet v. E. H. Bentall and Company, Ltd.*, I, M.A.R. 86 at p. 93.)

'not having the force of law.'

This does not mean unenforceable at law; whether the rules, practices, or customs originated in contract is immaterial; the words here refer to rules made by the Board of Trade or other authorities under the Factory Acts. They mean 'not having statutory authority.' (Ibid. at p. 95.)

On the other hand, the section does not suspend rules which obtain to maintain discipline or to create efficiency or improve working. (Ibid. at p. 96.)

'to comply with such a rule.'

For employers to dismiss workmen for breach of an undertaking not to join a Trade Union is an attempt to induce the workmen to comply with such a rule and is an offence. (*Guillet v. E. H. Bentall and Company, Ltd.*, I, M.A.R., p. 86.) See Amendment Act, 1917, Sec. 9.

'shall be guilty of an offence.'

The liability is a penalty in respect of each offence not exceeding £50. Section 14 (e).

If any question arises whether any rule, practice, or custom is a rule, practice or custom which tends to restrict production or employment, that question shall be referred to the Minister of Labour and the Minister of Labour shall either determine the question himself or, if he thinks it expedient, or either party requires it, refer the question for settlement in accordance with the provisions contained in the First Schedule to this Act. The decision of the Minister of Labour or arbitration tribunal, as the case may be, shall be conclusive for all purposes.

'If any question arises.'

A rule restricting the employment of a particular class of persons (e. g. non-unionists) necessarily restricts employment, and, apparently, need not be referred to the Ministry of Labour. (*Guillet v. E. H. Bentall and Company, Ltd.*)

By Section 9 of the 1917 Act : No workman employed on or in connection with munitions work shall be discharged on the ground that he has joined or is a member of a Trade Union, or that he has taken part in any trade dispute, and if any employer discharges a workman on any such ground he shall be guilty of an offence triable by a munitions tribunal of the second class under the Munitions of War Act, 1915, and shall be liable to a fine not exceeding £10, and the tribunal may order that the whole or any part of the fine imposed shall be paid as compensation to the workman :

Provided that nothing in this Section shall prejudice any right of action for wrongful dismissal that the workman may bring against his employer.

(4) The owner of the establishment shall be deemed to have entered into an undertaking to carry out the provisions set out in the Second Schedule to this Act, and 'any owner or contractor' or sub-contractor who breaks or attempts to break such an undertaking, shall be guilty of an offence under this Act.

By Section 15 of the Amendment Act, 1916, it is provided that where non-union labour is introduced during the War 'into any class of work in a controlled establishment in which' it was the practice prior to the War to employ union labour exclusively the owner of the establishment shall be deemed to have undertaken that such introduction shall only be for the period of the War, and if he breaks or attempts to break such an undertaking he shall be guilty of an offence under the principal Act and liable to a fine not exceeding £50.

By Section 8 of the 1917 Act : (1) The undertaking which the owner of a controlled establishment is by virtue of Sub-section (4) of Section 4 of the Munitions of War Act, 1915, deemed to have entered into shall include an undertaking that piece prices, time allowances, or bonuses on output, or the rates or prices payable under any other system of payment by results, once fixed in the establishment may not be altered except in accordance with any procedure which has been adopted by agreement between the owner of the establishment and the workmen or their representatives and is in force in the establishment at the passing of this Act or by the direction of the Minister of Munitions, which direction shall not be given except in accordance with an agreement between the owner of the establishment and the Trade Unions representing the workmen affected by the alteration, or failing agreement after consultation with the parties concerned :

Provided that this provision shall not apply where the alteration is made in accordance with the directions as to the rates of wages of female workers given by the Minister of Munitions under Section 6 of the Munitions of War (Amendment) Act, 1916, nor shall this provision apply to shipbuilding yards or ship-repairing yards, but as respects such yards the Minister of Munitions or the Admiralty may make rules regulating the alteration of systems of payments by results therein.

(2) Where an alteration of a system of payment by results is made in accordance with the provisions of this Section, paragraph 7 of the Second Schedule to the Munitions of War Act, 1915, shall not apply.

'introduced . . . into any class of work in a controlled establishment *in which*'

These words are capable of bearing two meanings, accordingly as the words 'in which' are taken to refer to 'establishment' or 'class of work'. If the former were the meaning the guarantee would apply only to controlled establishments in which only union labour was employed, and not to particular trades or departments in such establishments, i. e. it might be argued that, though all boilermakers or even all the

skilled men in an establishment were unionists, the fact that some of the unskilled workers were unorganised removed the establishment from the scope of the guarantee.

(5) The employer and every person employed in the establishment shall comply with any regulations made applicable to that establishment by the Minister of Munitions with respect to the general ordering of the work in the establishment, with a view to attaining and maintaining a proper standard of efficiency and with respect to the due observance of the rules of the establishment.

If the employer or any person so employed acts in contravention of or fails to comply with any such regulation that employer or person shall be guilty of an offence under this Act.

By Section 10 of the Amendment Act, 1917 : Proceedings against a person for contravening or failing to comply with regulations made by the Minister of Munitions under Sub-section (5) of Section 4 of the Munitions of War Act, 1915, shall not be instituted except by the Minister of Munitions or the Admiralty, or by a person acting on his or their behalf.

As to penalty see Section 14 (c).

Ordering of work regulations are Order 106, 18th February, 1916; No. 127, 29th February, 1916; No. 671, 8th July, 1915; Nos. 662, 663, 664, 25th September, 1916.

See also Defence of the Realm (Consolidated) Regulations No. 8.

As to regulations issued see particularly Munitions (Ordering of Work) Regulations, 1916, and the Model Rules thereunder. A workman who repudiates his contract and never returns to work may nevertheless commit an offence against Regulation 2 'not attending regularly and working diligently.' For the total abstention from work is itself the offence contemplated by the regulation. (*G. Stothert and Company v. Hooper, I, M.A.R.*, p. 233; *Walker v. Beardmore and Company, S.M.A.R.*, p. 63.)

A medical certificate in general terms is not a conclusive defence to prosecution for irregularity. (*Colley v. Minister of Munitions, S.M.A.R.*, p. 21. *Goswell v. Minister of Munitions, S.M.A.R.*, p. 22.) But inasmuch as the regulation only requires the workman to attend and work during the ordinary hours of the establishment and a reasonable amount of overtime, if required, an absence on a Sunday is not an offence, for, although Sunday work may be paid double time, it is not the ordinary hours of the establishment nor overtime. (*Gloucester Railway Carriage and Wagon Company, Limited v. Trapp, I, M.A.R.*, p. 81.) Moreover it is now provided by Regulation 3 that no proceedings can be taken in respect of a refusal to work on a Sunday. (*John I. Thorhyeroff and Company, Limited v. Stonehouse, I, M.A.R.*, p. 166; see also *Foster v. Bolton and Sons, Limited, II, M.A.R.*, p. 57.)

Where men have been employed on time rate and the masters without their consent propose to pay piece rate, an order to work piece rate is not a 'lawful order', and its disobedience is not punishable.—(*Nat. Projectile Factory v. Fagan, II, M.A.R.*, p. 75; but see *Shaw v. Stein and Company, S.M.A.R.*, p. 87, *Baston v. Minister of Munitions, II, M.A.R.*, p. 114.)

5. Section 5 of the Principal Act deals with the limitation of profits in a controlled establishment.

See also Section 22 of the Amendment Act, 1916, and the Munitions (Limitation of Profits) Rules, 1915.

6.—(1) If any workman in accordance with arrangements made by the Minister of Munitions with or on behalf of Trade Unions enters into an undertaking with the Minister of Munitions that he will work at any controlled establishment to which he may be assigned by the Minister, and be subject to the penalty imposed by this Act if he acts in contravention of or fails to comply with the undertaking, that workman shall, if he acts in contravention of or fails to comply with his undertaking, be guilty of an offence under this Act.

(2) If any employer dissuades or attempts to dissuade a workman in his employment from entering into an undertaking under this section, or retains or offers to retain in his employment any workman who has entered into such an undertaking after he has received notice from the Minister of Munitions that the workman is to work at some other establishment, that employer shall be guilty of an offence under this Act.

As to the form and implication of such arrangements see *Collins v. Brazil Straker and Co.*, I, M.A.R., p. 27, and the W.M.V. forms of the Ministry of Munitions; *Allaby v. Daimler*, II, M.A.R., p. 124.)

By Section 3 of the Amendment Act, 1916 : (1) Where a workman has entered into an undertaking with the Minister of Munitions under Section 6 of the principal Act, and was at the time of entering into that undertaking in the employment of any employer, then if that employer within the period of six weeks from the date of the undertaking dismisses that workman from his employment, he shall be guilty of an offence under the principal Act, and shall be liable to a fine not exceeding £5, unless he proves that there was reasonable cause for dismissing the workman.

(2) It is hereby declared that where the fulfilment by any workman of any contract is interfered with by the necessity on his part of complying with an undertaking entered into by him under Section 6 of the principal Act, that necessity is a good defence to any action or proceedings taken against that workman in respect of the non-fulfilment of the contract so far as it is due to the interference, and he shall be entitled to enter into such an undertaking notwithstanding the existence of such a contract.

(3) Section 6 of the principal Act shall apply to a workman who had before the passing of the principal Act entered into an undertaking of the nature mentioned in that Section in like manner as if the undertaking had been entered into in pursuance of that Section.

By Section 4 of the Amendment Act, 1916 : Where a person who has been temporarily released from naval or military service for the purpose of employment on or in connection with munitions work, or a workman who has entered into an undertaking with the Minister of Munitions under Section 6 of the principal Act, or to whom that Section is applied by this Act, has been assigned to any employer, and that employer has entered into an undertaking with the Minister of Munitions as to the class or description of work on or in connection with which the person or workman so assigned to him is to be employed, then, if the employer acts in contravention of or fails to comply with any of the provisions of 'the undertaking', he shall be guilty of an offence under the principal Act and liable to a fine not exceeding £5.

'The undertaking.'

The stipulations as to payment are some of the provisions of the undertaking between the employer and the Minister, and the local tribunal has jurisdiction to entertain proceedings by the workman for breach of the undertaking. (*Collins v. Brazil Straker and Co., I, M.A.R., p. 27.*)

7. By Section 2 of the Amendment Act, 1917 : The Minister of Munitions, on being satisfied that the provisions of Section 7 of the Munitions of War Act, 1915, as amended by any subsequent enactment. can consistently with the national interests be repealed, may by order repeal those provisions, and thereupon the following provisions shall have effect in lieu thereof :—

(1) It shall not be lawful for a person without the consent of the Minister of Munitions to 'give employment' to a workman who has, since the passing of this Act, been employed—

(a) 'on or in connection with munitions work of a class specified in paragraph (a) of Sub-section (1) of Section 9 of the Munitions of War (Amendment) Act, 1916' ; or

(b) on or in connection with munitions work of any other class which may be specified in an order of the Minister of Munitions

where the work on which he is to be employed is not work on or in connection with munitions work.

The consent of the Minister of Munitions for the purposes of this provision may be given either as respects an individual case or generally as respects work or workmen of any particular class or description :

(2) If any person contravenes this provision he shall be guilty of an offence, triable by a munitions tribunal of the second class, under the Munitions of War Act, 1915, unless he proves that he did not know that, and had taken all reasonable steps to ascertain whether, the workman had been so employed ; but proceedings for such an offence shall not be instituted except by the Minister of Munitions or the Admiralty, or by a person acting on his or their behalf :

(3) A person guilty of such an offence shall be liable to a fine not exceeding £5 for each day or part of a day during which the contravention continues :

(4) The purpose of ascertaining whether the provisions of this Section have been contravened in any establishment shall be included amongst the purposes for which the powers of entry, examination, and inquiry conferred by Section 17 of the Munitions of War (Amendment) Act, 1916, are exerciseable.

'give employment' means employment under one contract of service. Alderson v. Smith, II, M.A.R., p 52.

An order repealing section 7 was made on October 15th, 1917.

'on or in connection with munitions work of a class specified in paragraph (a) of subsection (1) of section 9 of the Munitions of War (Amendment) Act, 1916.' That is

(a) The manufacture or repair of arms, ammunition, ships, vessels, vehicles, and aircraft, and any other articles or parts of articles (whether of a similar nature to the aforesaid or not) 'intended or adapted for use in war', and of any other ships or vessels or classes of ships or vessels which may be certified by the Board of Trade to be necessary for the successful prosecution of the War, and of any metals, machines, or tools required for any such manufacture or repair, and of the material, of 'any class specified in' an Order made for the purpose by the Minister of Munitions, required for, or for use in, any such manufacture or repair as aforesaid ;

'intended or adapted for use in War.'

This does not mean fit for such use by an alteration in structure or design, but fit in some high degree for such use, to be determined on the facts of each particular case. Railway wagons are thus vehicles 'adapted for use in War'. (*Shaw v. Lincoln Wagon and Engine Company, Limited*, I, M.A.R., p. 11), so also are Railway Locomotives (*Briggs v. L. & S. W. R. Company*, I, M.A.R., p. 43; *Mullins v. L. B. & S. C. R.*, I, M.A.R., p. 178.)

'any class specified in an Order.'

See Orders 107, 14th February, 1916; 314, 12th May, 1916; 530, 27th July, 1916; 855, 13th May, 1916; and 142, 29th January, 1917.

Whether specific articles are intended or adapted for use in war is a question of fact for the local Tribunal. (*Todd v. Avery*, II, M.A.R., p. 130.)

'Munitions work' generally is defined in section 9 of the Amendment Act, 1916, and, in addition to the foregoing, it includes

(b) The construction, alteration, or repair of works of 'construction and buildings for naval or military purposes, and of buildings' in which munitions work is or is intended to be carried on, and the erection of machinery and plant therein, and the erection of houses for the accommodation of persons engaged or about to be engaged on munitions work :

'Military purposes.' Work for the Army Canteen Board is work for 'military purposes.' (*Knight v. Navy and Army Canteen Board*, II, M.A.R., p. 139.)

It is doubtful whether, generally, the manufacture of materials required for the introduction of buildings in which munitions work is or is intended to be carried on is munition work. Where, however, the workmen are engaged on a direct contract for the construction of the building, even though the work is not done on the building itself, the work is munitions work. (*Sandberg v. A. D. Dawney and Sons, Limited*, I, M.A.R., p. 70; *Holloway Brothers v. Rosyth Brick and Tile Company, Limited*, S.M.A.R., p. 111.)

(c) The construction, alteration, repair, or maintenance of docks and harbours and work in estuaries in cases where such construction, alteration, repair, maintenance or work is 'certified by the Admiralty' to be necessary for the successful prosecution of the war; and

'certified by the Admiralty.' See Order of 13th May, 1916.

(d) the supply of light, heat, water, or power or the supply of tramway facilities in cases where the Minister of Munitions certifies that such supply is of importance for the purpose of carrying on munitions work, and the erection of buildings, machinery, and plant required for such supply; and

(e) the repair of fire engines and any other fire brigade appliances in cases where the Minister of Munitions 'certifies that such repair' is necessary in the national interest.

'certifies that such repair.' See Orders 13th May, 1916; 16th October, 1916.

'In any establishment of a class to which the provisions of this section are applied' by Order.

Before a workman comes within the operation of Section 7 of the Amendment Act he must not only (a) be employed on munitions work, but also (b) be employed in an establishment of a class to which Section 7 has been applied by Order. *Boyes v. Mowlem and Company*, I, M.A.R., p. 229; *M'Niell v. Ross*, S.M.A.R., p. 56; *Archibald v. Gray*, S.M.A.R., p. 61.

The classes of establishment concerning which Orders have been made are :—

(1) 'Any establishment, being a "factory or workshop", the business carried on in which consists "wholly or mainly in engineering", shipbuilding, or the production of arms, ammunition, or explosives, or of substances required for the production thereof.' See *Sandberg v. Dawney*, I, M.A.R., p. 70; *Bayliss v. Worsey*, II, M.A.R., p. 68.

(2) 'Any establishment supplying electric light or power in cases where the Minister of Munitions certifies that such supply is of importance for the purpose of carrying on munitions work;' and

(3) 'Any establishment which has been or may hereafter be declared to be a Controlled Establishment.' (Order September 6th, 1916.)

See *Boyes v. Mowlem*, I, M.A.R., p. 228.

(4) Any establishment belonging to or in the possession or under the control of His Majesty or any Government Department which 'is used for housing and storing ammunition or explosives or the materials used for their manufacture.' (Order September 6th, 1916.) See *Rawnsley v. Bradford Dyers*, I, M.A.R., p. 103. 'factory or workshop.'

A fire-clay mine situate within the curtilage of the works of a fire-brick manufacturer is not a factory or workshop. (*Knowles v. Olsett Colliery Company, Limited*, I, M.A.R., p. 63, but see *Ribblesdale Lime Company, Limited v. John Delancy, Limited*, II, M.A.R., p. 41.)

'wholly or mainly engineering.'

The manufacture of insulating materials and parts of electrical machinery is a business consisting wholly or mainly of engineering within the meaning of the Order. (*Mayne v. Insulators Company, Limited*, I, M.A.R., p. 1), but the mere presence of machinery to manufacture uniforms is not enough. (*M'Niell v. Ross*, S.M.A.R., p. 56.)

'is used.'

Such an establishment while in the course of construction does not come within such Order. (*Boyes v. John Mowlem and Company, Limited*, I, M.A.R., p. 228.)

Where a man is engaged part only of his time on munition work, he is nevertheless engaged on munition work. (*Whittingham v. New Liverpool Rubber Company*, II, M.A.R., p. 98.)

Paragraphs (6) to (e) are still material in connection with differences under Part One. See Section 3 hereof.

By Section 3 of the Amendment Act, 1917 : (1) If the provisions of Section 7 of the Munitions of War Act, 1915, as amended by any subsequent enactment, are repealed by an Order under this Act a contract of service between an employer and a workman employed on or in connection with munitions work shall, notwithstanding any agreement to the contrary, not be determinable by either party except by a week's notice or on payment of a sum equal to an average week's wages under the contract :

See *Morgan v. Fraser*, I, M.A.R., p. 109; *Stievin v. General Stores*, I, M.A.R., p. 124.

Provided that this Section shall not apply—

(a) Where under the contract a longer notice than one week is required ;

(b) in the case of workmen engaged in 'ship-repairing', or of workmen of any class which is 'exempted by Order' of the Minister of Munitions on the ground that the circumstances of their employment were such that the pro-

visions of this Section ought not to apply to them, or of workmen whose employment is of a 'discontinuous or temporary nature' ;

(c) in the case of the termination of a contract on the ground of such 'misconduct' on the part of either party or his agent as would justify the immediate termination of the contract by the other party.

(2) Any sum payable in lieu of notice under this Section by an employer or workman shall be recoverable before a munitions tribunal of the second class, and payment of a sum adjudged to be paid by such a tribunal in such proceedings shall be enforceable in like manner as payment of a fine imposed by the tribunal.

Nothing in this Section shall be construed as affecting the operation of any of the other provisions of the Munitions of War Acts, 1915 to 1917.

'Ship repairing.' The conversion and alteration of ships is not ship repairing. (*Holes v. Day, Summers and Company, II, M.A.R., p. 17. Mallon v. Harland and Wolff, II, M.A.R. (Ireland), p. 1.*)

'exempted by Order.'

The building industry was so exempted by Order of April 1918.

'Discontinuous or temporary nature.' Whether work is discontinuous or temporary is a question of fact for the local Tribunal. (*Foden v. Jacquet-Maurel, I, M.A.R., p. 237 ; Clark v. Holloway, III, M.A.R., p. 1.*)

'misconduct' is a question of fact. *Gleaves v. White, I, M.A.R., p. 67 ; Payne v. Brazil Straker, I, M.A.R., p. 233 ; Kilby v. Ordnance Factories, II, M.A.R., p. 121 ; Lane v. Ordnance Factories, II, M.A.R., p. 117.*

By Section 4 of the Amendment Act, 1917 : If the provisions of Section 7 of the Munitions of War Act, 1915, as amended by any subsequent enactment, are repealed by an Order under this Act, Section 6 of the Munitions of War (Amendment) Act, 1916, shall apply to female workers employed on or in connection with munitions work in establishments of all classes, and accordingly in that Section the words 'of a class to which the provisions of Section 7 of the principal Act, as amended by this Act, are for the time being applied by an Order made thereunder' shall be repealed.

By Section 6 of the Amendment Act, 1916 : Where female workers are employed on or in connection with munitions work in any establishment of a class to which the provisions of Section 7 of the principal Act as amended by this Act are for the time being applied by an Order made thereunder. the Minister of Munitions shall have power 'by Order to give directions' as to the rate of wages, or (subject, so far as the matter is one which is dealt with by the Factory and Workshops Acts, 1901 to 1911, to the concurrence of the Secretary of State) as to the hours of labour or conditions of employment of the female workers so employed.

'by Order give directions.'

See Orders 888, 21st December, 1916 ; 49, 24th January, 1917 ; 703, 28th September, 1916 ; 48, 22nd January, 1917 ; 621, 13th September, 1916 ; 9, 6th January, 1917.

Any directions given by the Minister of Munitions under this Section shall be binding on the owner of the establishment and any contractor or sub-contractor employing labour therein and the female workers to whom the directions relate, and any contravention thereof or non-compliance therewith shall be punishable, in like manner as if the Order in which the direction is contained was an award made in settlement of a difference under Part I of the principal Act.

No direction given under this Section shall be deemed to relieve the occupier of any factory or workshop from the obligation to comply with the provisions of the Factory and Workshops Acts, 1901 to 1911, or of any Orders or regulations made thereunder, or to affect the liability of any person to be proceeded against for an offence under the Employment of Children Act, 1903, so however that no person be twice punished for the same offence.

‘ By order to give directions.’

Recommendatory directions as to Circular L 29 are not directions by order within this section. (*Binns v. Naysmith, Wilson and Company, Limited, I, M.A.R., p. 169.*)

As to the presence of women as special arbitrators under this section, see Section 8 of the Amendment Act, 1916, and above.

By Section 7 of the Amendment Act, 1916 : The Minister of Munitions shall have power ‘ by Order to give directions ’ as to the rate of wages, hours of labour, or conditions of employment of semi-skilled and unskilled men employed in any controlled establishment on munitions work being work of a class which, prior to the War, was customarily undertaken by skilled labour, or as to the time rates for the manufacture of complete shell and fuses and cartridge cases in any controlled establishment in which such manufacture was not customary prior to the War ; and any direction so given shall be binding on the owner of the establishment, and any contractor or sub-contractor employing labour therein, and the workers to whom the directions relate, and any contravention thereof or non-compliance therewith shall be punishable in like manner as if the Order in which the direction is contained was an award made in settlement of a difference under Part I of the principal Act.

‘ by Order to give directions.’

See Orders 589, 7th September, 1916 ; 71, 24th January, 1917.

By Section 8 of the Amendment Act : The Minister of Munitions may constitute special arbitration tribunals to deal with differences reported under Part I of the principal Act which relate to matters on which the Minister of Munitions has given or is empowered to give directions under the last two preceding Sections, and the Board of Trade may refer any such difference for settlement to such a tribunal in lieu of referring it for settlement in accordance with the First Schedule to the principal Act.

(See *Cairney v. Beardmore and Company, S.M.A.R., p. 102.*)

(2) The Minister of Munitions may also refer to a special arbitration tribunal so constituted, for advice, any question as to what directions are to be given by him under the said Sections.

(3) The tribunal to which matters and questions relating to female workers are to be referred under this Section shall include one or more women.

8.—(1) The Minister of Munitions ‘ may make rules ’ authorising the wearing of badges or other distinctive marks by persons engaged on munitions work or other work for war purposes, and as to the issue and return of any such badges or marks, and may by those rules prohibit the use, wearing or issue of any such badges, or of any badges or marks indicating or suggesting that any person is engaged on munitions work, or work for war purposes, except as authorised by those rules.

‘ make rules.’ See Order 1,000, 29th July, 1915.

(2) If any person acts in contravention of, or fails to comply with any such rules, he shall be guilty of an offence against this Act.

9. This part of the Act shall apply to any docks used by the Admiralty for any purposes connected with the war as it applies to establishments in which munitions work is carried on, with the substitutions in relation to any such docks or persons employed in any such docks of the Admiralty for the Minister of Munitions.

10 and 11. Sections 10 and 11 have no particular application to Labour.

12. Section 12 of the principal Act, as amended by Section 14 of the Amendment Act, 1916, provides that

If any person makes any false statement or representation, or gives any false certificate, or furnishes any false information for the purpose of evading any provision of this Act; or (b) in any proceedings before any munition tribunal, arbitration tribunal, referee, or board of referees under this or the rules made thereunder; or (c) to the Minister of Munitions, or any officer employed by him, for the purpose of obtaining or retaining employment, or of obtaining or retaining the services of any workman; or if any person alters or tampers with a certificate given under Section 7 of this Act, or personates or falsely represents himself to be a person to whom such a certificate has been given, or allows any other person to have possession of any such certificate issued for his use alone, he shall be guilty of an offence, and liable on conviction under the Summary Jurisdiction Acts to imprisonment with or without hard labour for a term not exceeding three months, or to a fine not exceeding £50.

13. There shall be paid out of moneys provided by Parliament to any person being a member of an arbitration tribunal, munitions tribunal, or board of referees under this Act, or being a referee under this Act, and to any other officers required in connection with any such tribunal or board, such remuneration and travelling or other expenses (including compensation for loss of time) as the Minister of Munitions or Minister of Labour, as the case may be, with the sanction of the Treasury, may determine.

14.—(1) Any person guilty of an offence under this Act—

(a) shall, if the offence is a contravention of or failure to comply with an award, be liable to a fine not exceeding £5 for each day or part of a day during which the contravention or failure to comply continues, and, if the person guilty of the offence is an employer, for each man in respect of whom the contravention or failure takes place; and

(b) shall, if the offence is a contravention of the provisions of this Act with respect to the prevention of lock-outs, be liable to a fine not exceeding £5, in respect of each man locked out, for each day or part of a day during which the contravention continues; and

(c) shall, if the offence is a contravention of the provisions of this

Act with respect to the prohibition of strikes, be liable to a fine not exceeding £5 for each day or part of a day during which the contravention continues ; and

(d) shall, if the offence is a contravention of or failure to comply with any regulations in a controlled establishment or any undertaking given by a workman under Part II of this Act, be liable in respect of each offence to a fine not exceeding £3 ; and

(e) shall, if the offence is a contravention of or failure to comply with any other provisions of this Act, be liable in respect of each offence to a fine not exceeding £50.

(2) A fine for any offence under this Act shall be recoverable only before the munitions tribunal established for the purpose under this Act.

15. Provides for the constitution of munition tribunals, both general and local.

Local Tribunals have power to deal only with any contravention of, or failure to comply with, any regulation made applicable to a controlled establishment or any undertaking given by a workman under Part II of this Act, and, by Section 18 of the Amending Act, 1916, with all offences when the maximum fine does not exceed £5.

When a complaint is made to a munitions tribunal which concerns a matter not the subject of an offence, the tribunal can receive evidence which is not on oath. (*Kinder v. Delta Metal Company, I, M.A.R., p. 46 ; Scottish Tube Company, Limited v. M'Gillivray, S.M.A.R., p. 16.*)

Pressure of work is not a sufficient excuse for non-attendance and does not justify a rehearing. (*Robinson v. Kerr, S.M.A.R., p. 81.*)

By Section 15 (4) of the principal Act, as amended by Section 13 of the Amendment Act, 1916—

(4) A person employed or workman shall not be imprisoned in respect of the non-payment of a fine imposed by a munition tribunal for an offence within the jurisdiction of a tribunal, but that tribunal may, without prejudice to any other available means of recovery, make an Order requiring such deductions to be made on account of the fine from the wages of the person employed or workman, as the tribunal thinks fit, and requiring the person by whom the wages are paid to account for any sums deducted in accordance with the Order.

A person can only be convicted of an offence of which he has received notice, but such notice need not have the particularity of an information. (*Shelton Iron Company, Limited v. Harsall, I, M.A.R., p. 208.*)

By Section 18 (2) of the Amendment Act, 1916 : (a) In proceedings before a munitions tribunal the chairman shall, before giving his decision, consult with the assessors, and in all cases where the assessors are agreed he shall, except as respects questions which appear to the chairman to be questions of law, give effect to their opinion in his decision ;

(b) where the person or persons by or on behalf of whom or against whom the complaint is made in any proceedings before a munitions tribunal is or are a female

worker, or two or more female workers, the assessor or one of the assessors chosen from the panel of persons representing workmen shall be a woman.

By Section 18 (3) of the Amendment Act, 1916 : (3) Decisions of munitions tribunals shall be subject to appeal to such judge of the High Court as may be appointed by the Lord Chancellor for the purpose on any ground which involves a question of law or a question of mixed law and fact, or on any other ground that may be prescribed in rules made by the Lord Chancellor, in such cases and subject to such conditions and such manner, as may be specified in such rules, and whether by means of the statement of a special case for the opinion of the judge or otherwise ; and those rules may provide for such appeals in any classes of cases specified therein being heard and determined in a summary manner, and for the fixing, remission, or reduction of any fees and scales of costs, and as to the manner in which effect is to be given to the decision of the judge, and the decision of the judge on any such appeal shall be final and binding on all munitions tribunals.

Evidence cannot be given before the appeal tribunal, if it could have been presented to the local tribunal. (*Thompson v. Toolmakers*, II, M.A.R., p. 145 ; *Scottish Iron and Steel Company v. Hands*, S.M.A.R., p. 1 ; *Inglis and Company, Limited v. Walmer*, S.M.A.R., p. 10.)

The Judge in England was Mr. Justice Atkin ; in Scotland, Lord Hunter ; in Ireland, Mr. Justice Ross.

Section 22 of the Amendment Act deals with costs in vexatious proceedings.

Sections 16, 17, and 18 have no particular relation to Labour.

19. In this Act, unless the context otherwise requires :—

(a) The expression ‘lock-out’ means the closing of a place of employment or the suspension of work, or the refusal by an employer to continue to employ any number of persons employed by him in consequence of a dispute, done with a view to compelling those persons, or to aid another employer in compelling persons employed by him, to accept terms or conditions of or affecting employment.

(b) The expression ‘strike’ means the cessation of work by a body of persons employed acting in combination, or a concerted refusal under a common understanding, of any number of persons employed to continue to work for an employer in consequence of a dispute, done as a means of compelling their employer, or any person or body of persons employed or to aid other workmen in compelling their employer, or any person or body of persons employed, to accept or not to accept terms or conditions of or affecting employment.

20.—(1) This Act may be cited as the Munitions of War Act, 1915.

(2) This Act shall have effect only so long as the office of Minister of Munitions exists :—

Provided that this Act shall continue to apply for a period of twelve months after the conclusion of the present War to any difference arising in relation to the performance by the owner of any establishment of his

undertaking to carry out the provisions set out in the Second Schedule to this Act, notwithstanding that the office of Minister of Munitions and the Ministry of Munitions have ceased to exist.

For a consideration of the difficulties arising out of the ambiguity of this section, the reader is referred to 'The Munitions Acts and the Restoration of Trade Union Customs', by G. D. H. Cole and H. H. Slesser (J. S. Middleton, 33 Eccleston Square, London, S.W. 1), in which the question is very fully discussed.

SCHEDULE I

(See Sections 1 and 4)

1. Any difference, matter, or question to be referred for settlement in accordance with the provisions of this Schedule shall be referred to one of three following Arbitration Tribunals :—

(a) The Committee appointed by the First Lord of the Treasury known as the Committee on Production ; or

(b) a single arbitrator to be agreed upon by the parties, or in default of agreement, appointed by the Minister of Labour ; or

(c) a court of arbitration consisting of an equal number of persons representing employers and persons representing workmen, with a chairman appointed by the Minister of Labour.

2. The tribunal to which the reference is made shall be determined by agreement between the parties to the difference, or in default of such agreement, by the Minister for Labour.

3. The Arbitration Act, 1889, shall not apply to any reference under the provisions of this Schedule.

(4) The tribunal shall make its award without delay, and, where practicable, within 14 days from the date of reference. (Section 7 of the Amendment Act, 1917.)

SCHEDULE II

(See Section 4 (4))

1. Any departure during the War from the practice ruling in the workshops, shipyards, and other industries prior to the War, shall be only for the period of the War.

2. No change in practice made during the War shall be allowed to prejudice the position of the workmen in the owners' employment, or of their Trade Unions, in regard to the resumption and maintenance after the War of any rules or customs existing prior to the War.

'Workman.'

This expression includes not only persons whose usual occupation consists of manual labour, but also foremen, clerks, typists, draughtsmen, and other persons whose usual occupation consists wholly or mainly in work other than manual labour. (Amendment Act, 1916, Section 12.)

8. In any readjustment of staff which may have to be effected after the War priority of employment will be given to workmen in the owners' employment at the beginning of the War who have been serving with the colours, or who were in the owners' employment when the establishment became a controlled establishment.

4. Where the custom of a shop is changed during the War by the introduction of semi-skilled men to perform work hitherto performed by a class of workman of higher skill, the time and piece rates paid shall be the usual rates of the district for that class of work.

As to semi-skilled men, see Amendment Act, 1916, Section 7.

5. The relaxation of existing demarcation restrictions or admission of semi-skilled or female labour shall not affect adversely the rates customarily paid for the job. In cases where men who ordinarily do the work are adversely affected thereby the necessary readjustments shall be made so that they can maintain their previous earnings.

As to female labour, see Amendment Act, 1916, Section 6.

6. A record of the nature of the departure from the conditions prevailing when the establishment became a controlled establishment shall be kept and shall be open for inspection by the authorised representative of the Government.

7. Due notice shall be given to the workmen concerned wherever practicable of any changes of working conditions which it is desired to introduce as the result of the establishment becoming a controlled establishment, and opportunity for local consultation with workmen or their representatives shall be given if desired.

'Due notice.'

This is a question of fact to be decided by the local tribunal. (*Binns v. Naysmith, Wilson and Company, Limited, I, M.A.R., p. 169.*)

It is doubtful whether the Minister of Munitions has power by order under Sections 6 or 7 of the Amendment Act to prescribe the form of such notice. (*Per Atkin J., ibid. at p. 177.*)

'Changes of working conditions.'

A change from union to non-union labour is not a change of working conditions (Amendment Act, 1916, Section 15), nor is the shortening of time of grace in a working shift. (*Orr v. Beardmore and Company, S.M.A.R., p. 99.*)

'If desired.'

Where a local tribunal have proved as a fact that the worker after notice did not ask for local consultation, there is no further duty on the employer. (*Binns v. Naysmith, ibid.*)

8. All differences with workmen engaged on Government work arising out of changes so introduced, or with regard to wages or conditions of employment arising out of the War, shall be settled in accordance with this Act without stoppage of work.

9. Nothing in this Schedule (except as provided by the (third) paragraph thereof) shall prejudice the position of employers or persons employed after the War.

‘Third.’

In the principal Act ‘fourth’ was here inserted by mistake. (Amendment Act, 1916, Section 19.)

‘Shall be guilty of an offence.’

The liability is a penalty in respect of each offence not exceeding £50 (Section 14 (3) of the principal Act).

The English Munitions Appeal Reports are published by the Incorporated Council of Law Reporting for England and Wales, 10 Old Square, Lincoln’s Inn, W.C., from whom they can be obtained. The Scottish Munitions Appeal Reports by William Hodge, 12 Bank Street, Edinburgh.

APPENDIX C

GOVERNMENT PLEDGES CONCERNING THE RESTORATION OF TRADE UNION CONDITIONS

THE following quotations contain the most important passages from Ministerial pronouncements dealing with the restoration of Trade Union conditions after the War, and indicate the extent to which the Government, and indeed any Government, was pledged to ensure that restoration should take place wherever the Unions desired it. These quotations should be read in conjunction with the discussion of the problem in Chapter XII.

Mr. Tennant (War Office), House of Commons, 8th February 1915 :

‘I would appeal to the hon. gentlemen below the gangway (the Labour Party) to help us to organize the forces of labour, to help us so that where one man goes to join the colours his place may be taken by a man who is not of military age, or military physique, or by a woman. I believe that might be done.’

‘I would ask them to assist the Government also in granting only for the period of the War some form of relaxation of their rules and regulations.’

‘In the works of many firms, not so much armament firms as clothing firms, Factory Act rules and regulations have been largely abrogated already, and I would seriously ask the Labour Party whether they could not prevail upon the Trade Unionists in this country to adopt a measure of a purely temporary kind for the relaxation of some of the more stringent regulations.’

Mr. Harold Baker (War Office), House of Commons, 9th February 1915 :

‘There are certain steps which may be considered desirable. The Trade Unions have a perfectly proper desire to safeguard their interests against the time when peace returns. If we leave these things to be settled by fair and proper discussion outside we shall be more likely to achieve the result desired.’

Lord Kitchener, House of Lords, 15th March 1915 :

‘ It has been brought to my notice on more than one occasion that the restrictions of Trade Unions have undoubtedly added to our difficulties, not so much in obtaining sufficient labour, as in making the best use of that labour. I am confident, however, that the seriousness of the position as regards our supplies has only to be mentioned and all concerned will agree to waive, for the period of the War, any of those restrictions which prevent in the very slightest degree our utilizing all the labour available to the fullest extent that is possible.’

Mr. Lloyd George, Treasury Conference, 17th March 1915 :

‘ The second proposition is the suspension, where necessary during the War, of restrictions of output. Here, again, I want to make it perfectly clear that I am only discussing this suspension during the War. The increase in output is so essential to us, where we have to turn out munitions of war not merely for ourselves but to help our Allies, that I hope you will help us for the moment by suspending the operation of any rules or regulations which tend to diminish the output. I know it is a very difficult question for you to decide upon, but it is very important for the State at the present juncture.’

Mr. Asquith, at Newcastle, 20th March 1915 :

‘ What are those sacrifices ? They may, I think, be summarized under three heads—limitation of profits, the temporary suspension of restrictive rules and customs, and the provision of reasonable compensation in cases of proved injury or loss. The first, you observe, falls upon the employer, and the second upon the men—especially upon those men who are members of Trade Unions—and the third upon the State. Let me deal with each of them in a single sentence. As to profits, I believe we shall all agree that the firms and companies who are supplying the State with munitions of war should not be entitled thereby to make undue profits out of them. That we know is the opinion, and is going to be the practice, of some of the greatest and most representative of those bodies. Under the second head, I believe there is an equally general agreement, and I hope and trust that that agreement will be translated into practice, and that restrictive regulations, whether as regards output or as regards demarcation of different classes of labour—regulations of long experience, which we may without prejudice agree to be quite appropriate to normal conditions—may be suspended while war lasts, to be resumed thereafter. I know well that an agreement to that effect has been come to between the Federation of Engineering Employers and the great Trade Union, the Amalgamated Society of Engineers, which is the custodian and the experienced and tried trustee of the interests of the men, and I would venture to express a strong appeal that the agreement may be carried out not only as between the parties to it, but with the general assent of all men who in this critical stage of our fortunes are engaged in the fabrications of munitions of war. They will suffer for nothing in the long run.’

‘ I am not one of those, if there be such, who think that in these

matters the Trade Unions have been pursuing chimeras or indulging in a passion for domineering and restrictive regulation. I believe, on the contrary, that the great bulk, I won't say all—many of them are much open to argument—but the great bulk of the rules and customs which they have adopted, as the fruit of long experience, are justified by that experience, and have tended not to diminish but to increase the output of our industries. But we are living in exceptional times. We have to meet a special emergency, and you may be sure they will not be prejudicing the interests of their Unions or the cause which the Union represents if they consent, so long as those critical conditions prevail, to a temporary waiving and suspension of those customs and rules.'

Mr. Lloyd George, 22nd March 1915 :

'As to that . . . we realized that when Labour was making concessions to us by relaxing certain rules during the period of the War Labour was quite right in insisting on the strictest safeguards against those concessions being abused. I think you may say that we have practically accepted the safeguards suggested by the delegates ; we were so entirely in agreement with them as to the desirability of protecting the workmen's interests in the matter.'

Mr. Lloyd George, House of Commons, introducing the Munitions Bill, 23rd June 1915 :

'The next thing is the suspension during the War, on the honour and pledge of the nation that things would be restored exactly to the position they were in before the suspension, of all these restrictions and practices that interfere with the increase of the output of war materials.'

Sir John Simon, Home Secretary, speaking on the second reading of the Munitions Bill, 28th June 1915 :

'In the first place, you must make it plain, and you must not only make it plain, but as far as may be you must provide in your Statute that this concession that workpeople make in the crisis of war for the country's sake is a temporary concession, which does not in the least prejudice their established rights so hardly won after, in many cases, a long struggle in times past. This is a provision for the War, and for the War only, and it is an essential condition of that which we are asking, that when the War is over the honour of the House of Commons is pledged, the promise of the Government is given, and all who really try to carry this Bill undertake that organized workpeople are not to suffer because of the temporary abandonment of Trade Union restrictions.'

Mr. Lloyd George, in the House of Commons, on progress of Munitions Department, 28th July 1915 :

'I hope they will take not merely a promise, but a solemn undertaking put in an Act of Parliament, by which not merely the Government, but the whole of the House of Commons and the House of Lords, undertook that at the end of the War the fact of their abandoning those practices now will not prevent them restoring the practices at the end of the War. It is so vital that this should be done during the War that even an undertaking of that kind must be honoured.'

Mr. Lloyd George, Trades Union Congress, 9th September 1915 :

'The next undertaking we gave was that we would give a guarantee that at the end of the War the pre-war conditions would be restored. How have we done that ? We have done it, not merely by solemn declarations on the part of the Government, but we have embodied them in an Act of Parliament. We have a statutory guarantee carried unanimously by Parliament, by men of all parties—employers, workmen, Liberal, Unionist, conscriptionist, anti-conscriptionist, pro-German and anti-German—all sorts and conditions of men. They are all in it, and they are all committed to that guarantee.'

Mr. Asquith. Reply to the Triple Alliance Deputation, 3rd August 1916 :

'On the first of the five proposals put before him (restoration of Trade Union practices after the War) the Prime Minister said that most explicit and emphatic pledges had been given that all Trade Union conditions should be restored after the War, and the Government had no intention of departing from that pledge in the least degree. Provision was made for the interpretation of these agreements in all controlled establishments, and the Government was carefully considering the kind of machinery to be set up to dispose of the difficulties of interpretation in other establishments.'

'Speaking generally on this point, he wished to say that the pledges which had been given, and the obligations incurred under them, were, in the view of the Government, obligations of honour and indisputably valid, and nothing but the assent of all the parties concerned could vary them or dispense with their complete fulfilment.'

Mr. Montagu, House of Commons, 15th August 1916 :

'But the cessation of disputes and the postponement of the reforms which slowly emerged from the clash of conflicting interests do not exhaust the full measure of the sacrifices which organized Labour has made. The Trade Unions place on one side the whole armour of Trade Union regulations upon which they had hitherto relied. For the weapons slowly forged during long years of struggle—rules and customs relating to hours of labour, overtime, the right of entrance to trades, demarcation of industry, the regulation of boy labour, and the exclusion of women from certain classes of occupations—all these, directly or indirectly, might have tended to reduce the output during the War. The Government asked Labour to put all these on one side. It was a great deal to ask. I doubt if any community has ever been asked for greater sacrifices ; but with a loyalty and statesmanship which cannot be over-estimated, the request was readily granted. The Trade Unions required, and they were right to require, a scrupulous record and recognition of what they were conceding. It was promised to them as a right, but they will receive more—not only the restoration of the system they temporarily abandoned, but the gratitude of the army and of the nation, and they will, I trust, place the nation still further in their debt by playing an important part in devising some system which will reconcile in the future conflicting industrial interests.'

APPENDIX D

RESTORATION OF PRE-WAR PRACTICES ACT, 1919

CHAPTER 42

An Act to make provision with respect to the restoration after the present war of certain trade practices, and to amend the law relating to munitions tribunals. A. D. 1919.

[15th August 1919.]

BE it enacted by the King's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows :

1.—(1) Where, in any establishment to which this Act applies, any rule, practice or custom obtaining before the war in any industry or branch of an industry (hereinafter referred to as a trade practice) has, during and in consequence of the present war, been departed from, the owner of that establishment shall be under an obligation, at the expiration of two months from the passing of this Act, to restore or permit the restoration of the trade practice so previously obtaining and for one year after such restoration is effected, or if it has been effected before the date of the passing of this Act for one year after that date, to maintain or permit the continuance of the trade practice. Restoration
of pre-war
practices

(2) Where any industry or branch of industry, which before the war was not carried on in an establishment, commenced to be carried on in the establishment during the war and continues to be carried on therein after the termination thereof, or where the establishment is one which commenced to be worked after the beginning of war, the owner of the establishment shall be under the obligation, at the expiration of two months from the passing of this Act, to introduce or permit the introduction of, and for one year after such introduction is effected, or if it has been effected before the date of the passing of this Act for one year after that date, to maintain, or permit the continuance of, such trade practices as obtained before the war in other establishments where that industry or branch was carried on under circumstances most nearly analogous to those of the establishment in question.

(3) Save as expressly provided by this section, nothing in this section shall prejudice the position of employers or persons employed after the war.

2.—(1) If any person fails to comply with an obligation imposed upon him by this Act, he shall be guilty of an offence under this Act, and on conviction shall be liable to a fine not exceeding twenty-five pounds for each day or part of a day during which the offence continues : Legal pro-
ceedings.

Provided that no person shall be entitled to institute proceedings against an owner of an establishment for failure to comply with any such obligation unless one week at least before instituting the proceedings he has served on the owner notice in the prescribed form of his intention to institute proceedings specifying the nature of the trade practice to which the obligation relates, and, if the change of practice was made in pursuance of an agreement, also specifying the agreement.

(2) Proceedings for offences under this Act shall be taken before munitions tribunals of the second class in like manner as for offences under the Munitions of War Acts, 1915 to 1917.

(3) Proceedings against an employer for an offence under this Act may be instituted by or on behalf of any worker affected or by or on behalf of a trade union or federation of trade unions, and any party to any such proceedings may appear and be represented by an official of the trade union or federation of trade unions, or of the federation or association of employers, to which he belongs.

(4) If an agreement has been entered into providing for the modification of an obligation under this Act, to which the owner of an establishment is a party, or to which any group or association of employers of which the owner is a member is a party, it shall be a good defence in any proceedings against him in respect of an alleged breach of his obligation if he proves that the breach is authorized by the agreement, and that the trade union whose custom it was before the war to maintain the trade practice to be modified is a party to the agreement or is a member of a federation of trade unions who are parties thereto.

(5) Where, in the case of proceedings against the owner of an establishment for failure to comply with an obligation imposed by subsection (2) of section one of this Act, the tribunal is satisfied that a failure to comply with the obligation has occurred, but that it has occurred from a genuine and reasonable doubt as to the nature of the trade practice to which the obligation relates or otherwise as to the interpretation of the obligation, and not from any refusal or unwillingness to comply therewith, the tribunal may, instead of imposing any penalty, make an order declaring the true interpretation of such obligation in relation to the matter or matters complained of, and such an order shall be binding on the parties to the proceedings, and a copy thereof shall be registered at the Ministry of Labour.

Provisions
as to
munitions
tribunals.

3.—(1) Subject to the provisions of this section, the provisions of the Munitions of War Act, 1915 to 1917, relating to munitions tribunals, shall, notwithstanding anything in those Acts limiting the duration thereof, continue in force so long as may be necessary for the purposes of this Act.

(2) The powers of the Minister of Munitions in relation to munitions tribunals shall, as from the passing of this Act, be transferred to the Minister of Labour :

Provided that nothing in this provision shall affect any appointment, choice of assessors, or rules of procedure (including rules as to appeals) made before and in force at the passing of this Act; but anything which under the rules of procedure so in force is to or may be done by or to the Minister of Munitions shall or may be done by or to the Minister of Labour, and those rules shall have effect accordingly.

A. D. 1919.

4.—(1) The establishments to which this Act applies are establishments in which munitions work within the meaning of the Munitions of War Acts, 1915 to 1917, has during the present war been carried on, and any other establishment in which the departure from the practice was made in consequence of the two agreements of the nineteenth and twenty-fifth days of March nineteen hundred and fifteen respectively, commonly known as the Treasury agreements, or in pursuance of any other agreement in writing.

Establishments to which Act applies.

(2) This Act shall apply to Crown establishments, that is to say, establishments belonging to or under the control of His Majesty or any Government department, in like manner as it applies to establishments belonging to subjects, and any proceedings which under this Act can be taken by or against the owner of any establishment may be taken by or against the Crown establishment concerned in the name by which the establishment is usually known.

5. The Minister of Labour may make regulations prescribing anything which under this Act is to be prescribed, and as to the registration of orders which under this Act may be registered at the Ministry, the inspection of orders so registered, and generally for carrying this Act into effect.

Regulations by Minister of Labour.

6.—(1) This Act may be cited as the Restoration of Pre-War Practices Act, 1919.

Short title and repeals.

(2) Subsection (3) of section four and paragraphs (1) and (2) of the Second Schedule to the Munitions of War Act, 1915, are hereby repealed.

5 & 6 Geo. 5. c. 54.

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